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PREFACE

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The seventh annual conference for graduate students in the College of Languages, Linguistics, and Literature was held in April of 2003 at the University of Hawai'i at Mānoa. The theme of the conference was "Breaking Through the Boundaries of Academia," and we were fortunate to have Dr. Gayatri Chakravorty Spivak of Columbia University as the keynote speaker, while she was the visiting Citizens' Chair in the Department of English. Her topic "Beyond Academic" was most appropriate for this year's participants whose scholarly themes both encompass and transcend the classroom.

The 2003 conference had a total of 42 presenters from all disciplines of Languages, Linguistics, and Literature. The conference was attended by many fellow graduate students and professors who enthusiastically contributed their reflections on the presented papers. The committee for this year's conference met and organized it very thoroughly. Allison Ikeda and Timothy Pasch, the committee chairs for the 2003 conference, dedicated themselves beyond our expectations to make it happen. Thanks to their efforts, as well as the other volunteers' active cooperation, the conference was able to provide a successful opportunity for LLL graduate students to earn valuable academic experience.

The proceedings of the 2003 conference were made possible only with the abundant help provided to the editors. The editors would like to express sincere gratitude to the assistant editors without whose help we could not have read through the numerous manuscripts in the first editing stage. We would also like to thank the support of the College of Languages, Linguistics, and Literature: Dean Joseph O'Mealy, Iris Chang, proceedings supervising advisor; Marie-Christine Garneau, Conference Advisor; Johnny Chiem, Kiel Kanegawa, Thomas Nozaki, and Lisa Xiao, student publication specialists. Without their consistent assistance throughout the process of editing, two naïve editors like us would not have seen the completion of the proceedings. With plenty of mahalo and deep sincerity, we are happy to present the fine works by the graduate students presented at the 7th conference.

I. East Asian Languages and Literatures

YI KYU-BO'S REAL WORLD VIEW IN VERSE: AN ECOCRITICAL REVIEW

Steven Hall, Department of East Asian Languages and Literatures

> *Sublime language is of its nature worldless; / It's not necessary to carve and trim.*
> *This is wisdom that springs from nature, / The longer chewed the better the taste. (17)*

Yi Kyu-bo's poetry reflects an acute awareness of his surroundings and his sense of place. Yi's observations of his environment, given voice through his poetry, suggest he felt a distinct physical and emotional connection to the natural world. This quality of Yi, as expressed through his poetry, begs a critical study of him and his poetry through the guise of ecocriticism.

Ecocriticism is a literary theory devoted to studying the relationship between literature and the physical environment. Ecocriticism analyzes the ways nature is represented in literature and attempts to identify authors and poets whose works manifest an ecological awareness. In order to understand this ecological awareness, ecocritics often study the environmental conditions of an author's life, considering the influence of place on the imagination. By observing where an author lived, traveled, and wrote, ecocriticism attempts to help us understand an author's work (Glotfelty, Introduction).

Yi was born in 1168 to a local government official during the military dictatorship of the Ch'oe family. Yi was a brilliant student and during his life he accepted several positions, including chief minister (Pratt and Rutt, 520). Yi was a gifted writer and his "straightforward" expression often "stood in the way of his upward course." However, Yi's abilities as a leader and scholar eventually helped him become "recognized as the greatest scholar and statesman that Korea had yet seen" (Rutt, 194). Despite this prominence in government circles, I will utilize Yi's poetry to demonstrate that his heart resided in nature, away from the complexities and pressures of politics. A sampling of Yi's poetry will demonstrate how he viewed the natural world, often finding truth in its beauty.

Consider the following poems where Yi finds beauty in some of the simple, even mundane aspects of his surroundings. In "Cool Spring" Yi portrays a common "spring by the roadside" as something of great worth, even holy:

> For dry travellers, north and south,
> there's a cool spring by the roadside.
> One small spring gives abundance to the land;
> bow twice before you drink. (4)

By bowing to the spring Yi endows it with human traits, making it something to be revered and honored. Here Yi views nature as a great benefactor, something deserving of his gratitude and reverence.

Equally ordinary and ubiquitous as a roadside spring is a tree. But the magnitude of their numbers does not prevent Yi from observing the blessings and benefits provided by just one tree, as delineated in "Big Tree." Yi writes that a tree is:

> Good for relief from dog-day heat;
> perfect for refuge from sudden summer showers;
> an umbrella of cool shade;
> purveyor of benefits various. (5)

By calling the tree a "purveyor of benefits various," Yi again endows nature with human characteristics, deserving of his gratitude and humility. These two poems demonstrate Yi's acute awareness of his natural surroundings and appreciation for the benefits of nature found in its simplest, even common forms.

As suggested by Yi's introductory passage above, Yi believed nature contains wisdom in addition to beauty, available to any individual willing to chew long enough. Indeed, Yi garnered many lessons from his

observations of nature. As the premier poet of the day one of Yi's most distinguishing characteristics was his ability to express carefully crafted tidbits of wisdom through poetry. Rather than carve and trim his poems into stale, trite recitations with little of nature's original force remaining, Yi gave us the meat. As he puts it in "On Poetry," "decorating and chiseling for embellishment / are of secondary importance" (81).

For Yi, meaning was primary. In the same poem he wrote that true "meaning is postulated in Heaven." Having acknowledged its source, Yi readily admits that when struggling to express this meaning, "it is hard to get it right." Although his contemporaries were perfectly "aware of this difficulty," he lamented they merely "decorate the skin colorfully." They were "content to decorate the exterior," he writes, the result being to "grab the flower and abandon the fruit / caus[ing] the poem to lose real meaning."

All this concern for meaning clearly shows Yi considered poetry a vehicle for conveying truth. As demonstrated in "Cool Spring" and "Big Tree," Yi saw nature as something profoundly transcendent, full of truths he hoped to convey to the reader of his poems. This fact is significant considering the subject matter of his poems often appears simple and ordinary. Thankfully, Yi placed equal importance on expression, guaranteeing the reader a pleasurable experience while working to discover the meaning Yi extricated from his surroundings. Yi explained this essential relationship of expression and meaning when he wrote, "Deep thought without smooth expression / makes for course texture; / the unfolding of meaning is precluded" (81).

By combining careful descriptions of his environment with subtle, underlying meaning, Yi created a successful formula. By juxtaposing the opposing image of the mundane with the exquisite, Yi finds meaning everywhere about him. Kevin O'Rourke, translator of Yi's poetry used for this paper, rightly calls these poems "vibrantly alive…grounded in the cares and concerns of daily life" (Introduction). This starkly contradicts Nam Kong-ch'ŏl's estimation in his nineteenth century history *Famous Courtiers of Koryŏ* where he wrote that Yi "paid no attention to the trivial affairs of domestic life, but yielded himself up to the joys of the scholar—music and poetry" (Rutt 194). Nam's commentary of Yi was meant as praise, but he misjudges Yi. Perhaps Nam never took occasion to review Yi's poetry in enough detail. Nam's comments also suggest that many people commonly associate the life and poetry of a scholar with a life set apart from the world. The irony is that although many of Yi's poems contain aspects of domestic life, they are anything but "trivial."

Perhaps Nam's statement simply reflects the tendency of the bulk of poetry from Yi's era to lift nature above the "domestic life," to make it something apart, untouchable, and unreal. Since much of the poetry written by scholar-officials contains references to nature, it can be inferred that their romanticized imagery of nature, without flaw or equal, intended to be above the "affairs of domestic life." Yi distinguished himself from his contemporaries by breaking with the romanticized, idyllic descriptions of nature and creating poetry deeply rooted in the natural world in its many forms. Everything about Yi's poetry reflects the domestic, the earthy, and the natural; his poetry is a poetry of place. Yi did indeed closely observe the "trivial affairs of domestic life," infusing the mundane with the beauty and simplicity of the natural world. But Nam's observations weren't completely misguided. He acknowledges that Yi's "verse and prose were unlike anything that had gone before" and that "in literature he went his own way." Nam just failed to recognize this fundamental quality of Yi's unmatched poetry, one that separated him from his contemporaries.

A poem in two parts, where first the speaker and then a monk draw water from a well, is one of the best examples of Yi's ability to see the beautiful in the mundane "affairs of domestic life." Drawing water is a simple and monotonous chore, one probably undertaken several times throughout a day. But through Yi's verse the water in the speaker's jar becomes a canvas on which "The new moon is beautifully etched." The monk, who "coveted the moon," in turn fills his jar. If possible the monk would have bottled the moon to take it home with him. But even amidst such celestial images, Yi won't let us forget the worldly reality of drawing water at the well. He quickly brings the reader back to earth, for when the monk "reached his temple, he discovered / that tilting the jar meant spilling the moon" (26).

Though not always so readily apparent, the presence of nature amid the daily routine can be found in many of Yi's poems. Upon first glance, some of these poems do not appear to be directly about nature. However, by incorporating references both inconspicuous and obvious, Yi leads the reader to believe there is no separation between the "trivial affairs" of the world and nature. They cannot be torn asunder. One cannot be appreciated or understood without the other. The following selections are representative.

In four lines Yi describes a chance roadside meeting between two men who have "neither post nor temple." The two men clasp hands, an act demonstrated to be full of significance to Yi when he asks, "Who can know the depth of meaning of that handshake?" Had the poem ended on that line, Yi still would have suggested the import of the meeting. But in just one line, the final line, he injects extra emotional emphasis by describing the natural setting: "They stand upon the dusty road, wordless in the setting sun" (9). It becomes a frame for this simple but important meeting. By ending the poem with this line, Yi emphasizes that man and his actions are circumscribed by nature. Man's world and nature's world are the same. Man does not act in the world, but as part of the world.

This is the way Yi strives to understand the world in "Letting a rat go free." When food goes missing Yi wonders why he should single a rat out for blame when a rat is simply stealing "what people stole." Though not a thing of beauty, the rat reminds Yi that "People steal everything under Heaven," and rats are no different. Whether humans or rats, both are carrying out "Stratagems solely for mouth and belly" (88). Yi is a poet who, as one critic described another writer, "seek[s] to understand our life as continuous with the life of nature" (Sanders 191).

In another four-line poem Yi describes an old monk whose life, by Yi's estimation, stands to be envied. The monk, whose possessions include "One lamp, one incense burner," leads a simple existence. The monk spends his days as he wishes, "A chat when a guest comes; when he goes, a nap." But it's the single description of nature that captures the image of this monk, making this short poem about a simple monk something more. The first line reads, "Desolate the monk's room beside an ancient tree." Now it is no longer just a poem about an old, hermetic monk. With the addition of the tree the poem becomes the story of content old companions. The ancient tree is an appropriate companion for an "old monk," one that conjures images of isolation in both time and place (11). Yi liked monks and envied their lives surrounded by the sights and sounds of nature. In another poem he writes about retiring for the night while staying at Dragon Rock Temple. With "rain falling on the mountain," Yi declares beautifully, "a thousand pieces of gold would not buy / the flavor of the monk's house" (30).

Yi's most meaningful poems about nature are those in which he makes nature a metaphor for some truth observed by him. Yi begins one of these with his own job description at dawn, "A poet is a man of innate sensibility / he marvels at autumn in a single leaf." Here he states outright what we have already discovered, that he is capable of seeing and appreciating creation, even on a small scale.

On this morning Yi appears to have been thinking about the essence of his life. His was a life of contradiction, cluttered with the political duties of a scholar-official, yet filled with the simple pleasures of family and nature, at times separated from society. The speaker's voice in this poem sounds indecisive and even regretful. Yi seems to be wondering where he'd rather devote his time, while acknowledging that one can't be a "rat, head stretched out of the hole / unable to decide on direction." Yi suggests that one facing such decisions must "[harness] effort to will / spit on their hands and grab a title." Yi does offer an alternative, one that stands in stark contrast to Yi's political position: "To return to origins / to sit in the fields and devote oneself to farming" (45).

Echoing these sentiments in another poem, Yi acknowledges it is "better [to] become an old tiller of the soil / than [to] shame myself by buying preferment (41). Despite his contributions made and benefits received as a scholar-official, Yi often felt like trading the details and contradictions of political life for what he perceived as the simple life of a farmer.

There's no way to know if Yi would ever have really abandoned his life of position and prominence to "return to origins" if given the chance, but he clearly admires and even envies the farmer's life. In a way Yi is like Robert Frost trying to make his own decision at a fork in the road, "sorry [he] could not travel both." Once again drawing his lesson from nature, Yi finally concludes that in essence it doesn't really matter, for "When it comes to death and becoming clay under a pine / life is the same for low and high" (45).

But there is more significance in Yi's poem than just a discussion about life decisions. More than just noticing man and nature's shared cycle of life, in this poem Yi extrapolates an unavoidable truth from the changing seasons and ceaseless passage of time:

The seasons change a day at a time;
time never pauses in its flow.
Tomorrow is not today...
Life is a brief lodging,
a hundred years at most. (45)

He is acknowledging the one universal truth about each person's life on this earth: it must eventually end. No amount of wealth or prestige can stall death's coming.

Yi expresses this truth about life and the passing of time through a metaphor gathered from nature. Yi's thoughts were never far from the world of autumn leaves, pine trees, and blue waters. What one ecocritic wrote of Thomas Hardy's use of nature in his novels is equally true of Yi's poetry: "This landscape is no mere scenery, no flimsy stage set, but rather the energizing *medium* from which human lives emerge and by which those lives are bounded and measured" (Sanders 183).

In a moving poem describing the death of his daughter, Yi uses nature's abundant metaphors as a means of understanding and coping with his loss. Lamenting the capriciousness of this existence Yi writes:

I look at that field;
new shoots beset by unseasonable wind and hail
face certain destruction.
The Creator put her here;
the Creator just as suddenly snatched her away. (55)

Yi's daughter is like those new shoots, and in her frail, young age she was "beset by [an] unseasonable wind" and suffered death.

Drawing another metaphor from nature, Yi also describes his daughter as "a nestling fallen to the ground before it could grow." For not protecting this fragile creature he calls her death "a terrible indictment of her father's home." Even in this sorrowful poem about the death of a person, it is clear Yi saw the world through the lens of nature. His thoughts and vision of the world were not separate from nature. Humans and nature are both subject to the same forces of their Creator, both equally susceptible to loss.

The farmer was a favorite subject for Yi, being directly linked to land in his daily work and life. In this small collection of poems alone, O'Rourke chose to translate and include six poems written about or directly to farmers. In one particularly pertinent selection Yi gives voice to the farmer through his verse. In three of these poems, all written in the same vein, Yi holds the work of the scholar-official up to that of the farmer. These poems reveal a self-deprecating side of Yi. In "The Governor to the Elders," the speaker of the poem attempts to bring himself down to the level of his subjects by declaring, "I won't call myself governor / Think of me as an old farmer." In a further demonstration of humility he says to the people, "The drought continues; heaven sends no rain/this, too, is my responsibility / I apologize sincerely to all the elders" (35).

In another poem of self-awareness, entitled "Self Derision," Yi appears frustrated and exhausted by the concerns and temptations of a government official: "Who said I was to be the last of the honest men/ that I shouldn't fold and unfold with the times?" The stresses and strains have ground him down physically and mentally, "My shoulders are cold, the bones stick up / my hair is diseased, stubbly and sparse as mugworth." Associating the farmer with simplicity and tranquility the speaker continues, "Perhaps it's best if I become an old farmer / go back to the plough and daily carry the hoe" (14). In measuring the farmer against the government official Yi depicts him as an honest worker, unmovable and unchanging.

In two "Song[s] for the farmer," Yi gives the speaker's voice to the farmer. Doing this empowers the farmer, enabling him to describe his own predicament, and giving his sentiments more feeling and authenticity than if Yi simply wrote the poem in his own voice. Far from romanticizing his "mud-scored" and "[in]human" existence, the farmer laments the prevailing view of his contributions to society as he pleads, "Princes of the royal line, do not despise me / your riches and luxury all stem from me." If Yi is ever accused of writing

sentimentally or idyllically of the life of the farmer, these lines alone stand as evidence he recognized their plight and socioeconomic role in the divide separating rich and poor.

Yi's second "Song for the farmer" gives voice to the unjust taxation of farmers by village clerks, the local face of government, while the "new grain is still green in the paddies." In a stunning metaphor Yi describes how the land is "ploughed with great effort" and energy by the farmer while "the land grows rich." He speaks of two forms of wealth: one created by the beauty of nature and the other a monetary wealth rooted in human nature. In both cases the wealth and richness are "all predicated [on] us," the farmer emphatically states. In helpless frustration the farmer laments, "How can they afflict us so / will they take the skin from our bones?" (63). Poems like these demonstrate Yi understood and appreciated the life of a farmer, and was sensitive to his predicament.

Expressed through a variety of poetic situations and contexts, Yi demonstrated a personal attachment to nature, rooted in the common, ordinary situations of daily living. By combining "smooth expression" with his poetic depictions of nature in all its forms, Yi infused his poems with profound meaning, "postulated in heaven." Perhaps this is what O'Rourke meant when he called Yi a poet of transcendence (Introduction). The inherent meaning in Yi's poetry transcends his often simple and unspectacular subjects. Through his keen eye and wit, Yi was able to draw wisdom from a rat or tree as readily as from a well.

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CA AND "CONTEXT ISSUE": EXAMINATION OF NA/NE SHIFTING AMONG JAPANESE DIALECT SPEAKERS

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ABSTRACT

This paper is concerned with the connection between the sequential organization of interaction and the participants' orientation to the socio-cultural practice in their speech community. In the early developmental stage of the conversational analytic framework, there has been emphasis on study of the system of "fundamental mechanisms" of interaction observed by the participants (Sacks, Schegloff, & Jefferson, 1974; Schegloff, 1991). As the discipline attracts scholars from other paradigms such as linguistic anthropology, the issue of analytical procedures and "context" emerged. To what extent do we analysts need to take the cultural or historical context into consideration when we deal with a piece of interactional data? Following the advocates for "thick" conversational analysis such as Moerman (1988) and Bilmes (1992), I argue that in order to provide successful understanding, the analysts must know the speakers' linguistic and socio-cultural competencies as far as they are relevant to the interaction. In this paper, I will demonstrate how one's knowledge of local speech practice becomes crucial in the analyses, dealing with naturally occurring interactions among Osaka dialect speakers. The interactions were audio-recorded in three "speech situations" (Hymes, 1972), namely (i) physical therapy clinic, (ii) family, (iii) Japanese classical dance class, in which the recorder is a regular member. My analyses focus on a particular dialectal shift phenomenon (between interactional particle *ne* standard Japanese and *na* Kansai dialect), and first show the limitation of plain sequential analysis to account for the shifts found in all three data sources, then finally illustrate how ethnographic knowledge renders more elaborate conversational analyses.

1.0. INTRODUCTION

This paper is concerned with the connection between the sequential organization of interaction and the participants' orientation to the socio-cultural context in which the interaction is embedded. In the conversational analytic framework, there has been emphasis on sequential organization, or what the CA scholars refer to as the "fundamental mechanisms" of interaction (Sacks, Schegloff and Jefferson, 1974; Schegloff, 1991). Schegloff (1991) has proposed a very critical caveat on adopting socio-structural/socio-cultural aspects of the context into the analysis; he defined it as "**the issue of relevance**," which cautions us that we cannot simply import, in a priori manner, sociological categories such as male/female, school/court, or even more broadly, ethnicity to label the participants or the context. Schegloff (1991) is not saying that the persons are somehow *not* male or female for example, nor that these factors do not matter in analyzing interactions. What he is emphasizing here is that what we should be concerned with is whether we are getting at what the *parties* of the interaction are oriented to (p.65), and showing how the parties are embodying for one another the relevancies of the interactions and are thereby producing the social structure (p.51). In other words, analysis of talk-in-interaction must aim for *emic* units of contexts (Geertz, 1973) without speculating or "reading" the participants' minds.

Another fundamental concept of CA is, "interactional consequentiality (Schegloff, 1991)" (p.52). Any behaviors the participants contribute to in a particular spate of talk which they are in are assumed to be procedurally consequential. Hence CA emphasizes the ability to show an impact on the course of interaction through transcripts. In addition to sequential consequentiality, what we should not neglect is that interaction should be seen as a **social** achievement. The participants' strategic use of conversational mechanisms such as turn-organization systems (Sacks, et. al. 1974), preferences of adjacency pair construction (Pomerantz, 1984), or various shapes of repair act (Sacks, et. al. 1977; Schegloff, 1992; 2000) are performed so that they construct one sense of events rather than another (Edwards, 1997).

What I am suggesting, aligning with Moerman (1988) and Bilmes (1992), is that by examining how participants react to what has been said to them (i.e., consequence) we can empirically find out which contextual aspects are in the **foreground** during a specific interaction (Duranti & Goodwin, 1992; Ochs, 1996; Cook, 1999) from the participants themselves, rather than attaching a priori to the collective possible social factors residing in the analyst's research agenda.

With this "start data-internally then reach outward" approach in mind, this study focused on a particular standard-dialect style shift of "interactional" particles[1] (Okamoto, 2003) *na* and *ne* in the conversational data participated in by Osaka dialect speakers. Okamoto (1998; 2003; forthcoming) has shown in

her work that dialect speakers, particularly Osaka dialect speakers show dynamic and variant style-shifts in their talk, utilizing their more standard-like repertoire and more dialectal repertoire when they interact with each other. The aim of this paper, then, is to examine what their language use contributes to the participants' accomplishment in the interaction; as Schegloff (1991) puts it, "action projects consequences in a structure and texture of interaction which the talk is itself progressively embodying and realizing, and where the *particulars* of the talk inform what actions are being done and what sort of social scene is being constituted" (p.46, emphasis added). The analyses start with a fundamental sequential analysis of the data, then moves on to what Bilmes (2003) called "thick" analysis of conversation, reaching outward by integrating ethnographic contextual aspects. What is crucial here, however, is that I am not simply adopting any ethnographic information; rather, I only discuss what has been invoked by the participants' behavior in the data. In other words, with the approach I am suggesting in this study, the data guides the analyst and in one sense helps to narrow down which socio-cultural contexts are "relevant."

2.0. METHOD

2.1. DATA

Naturalistic conversational data were audio-recorded from the following speech situations; 1) a conversation taking place in a small private physical therapy clinic[2], 2) a telephone conversation between a mother and a daughter[3], and 3) a conversation taking place during a break classical Japanese dance lessons. Except for the telephone conversation, the tape-recorder was left in one spot in the area where most of the participants were present. The data were collected by the same person (person H in the transcription), who is a "regular" member of these speech communities. Since the researcher herself was not present at the time of interactions, H's retrospective description of the events was also taken into account in this study. The participants in the data all grew up in the local region (a rural city in Osaka); hence, I categorize them as native speakers of Osaka dialect.

Table 1 below shows the participants of each event and the total minutes of examined data:

TABLE-1: Participants and Total Minutes

	Clinic	**Mother-daughter**	**Dance class**
participants	a doctor (male 40's) two nurses (female 20's) two patients (female 40's & *60's*)	mother (*60's*) daughter (20's)	a teacher (female 50's) three students (female 40's 50's & *60's*)
total min.	**30 min.**	**25 min.**	**25 min.**

*Italicized participant (*60's*) is the person H.

2.2. METHOD OF ANALYSIS

My analyses focus on a particular dialect / standard shift phenomenon which is a shift between interactional particle *ne* in standard Japanese and *na* in Kansai dialect. First, I will follow the methodology adopted in Tanaka (2000) in studying *ne*, in order to show there is a limitation for plain sequential analysis when we want to account for the shifts found in all three data sources. Next, I will illustrate how ethnographic knowledge renders observable interactional consequentiality (Schegloff, 1991) related to what Edwards (1997) calls the impact on the on-going **social action** itself.

The data were transcribed by the researcher and examined specifically for the use of "final sentential particle" *na* (Osaka dialectal form) and *ne* (standard form)[4]. Following the methodology adopted in Tanaka (2000) in studying Japanese " final" particles (her term), I have also classified *na*'s and *ne's* according to their location within the uttered turn, namely 1) turn-final, 2) turn-internal, 3) turn-initial, and 4) *na/ne* as a full turn by itself. The borderline between turn-final versus turn-internal is not really a clear one; as Tanaka (2000) points out, various factors can go into such a distinction. However, based on the examples presented in her study, the crucial determining factor for Tanaka (ibid.) appears to be 1) syntactic construction of the utterance (i.e., whether the utterance can stand on its own at the locus of *ne* occurrence), and 2) turn-allocation, or how the turn is treated in the sequence (e.g., if there is a relatively clear speaker change by the other participants following the utterance with *ne*, such an utterance is a turn-final). See the example adopted from her study below:

1K.: **soredemo** **yappa** [redacted]:-
but as expected FP
'But as one might expect, ((you)) know'
2. **karada** **toka-** **fuku** **to** **sa:**
body for instance wipe if-then FP
'if for instance ((one)) rubs'
3. **kosuru** **to** **mata** **akaku** **naru** **n** **da** **yo** [redacted]=
scrub if-then again red become VN COP FP FP
'if ((one)) scrubs, then ((it))gets red again, ((you)) know'
4Y.: = **°A: sokka:°**
oh ((I)) see
'Oh I see'

(Adopted from Tanaka 2000:1139)

Line 1 *ne* appears just after an adverb *yappa* 'as expected,' which projects the production of further talk within its immediate context. This is an example of turn-internal *ne*. Line 3 *ne* follows the final predicate expression of the turn *akaku naru n da yo* 'becomes red', and is recognized as the turn-final *ne*. Syntactically, line 3 can be understood as a complete sentence, and immediately after line 3 there is a speaker change to Y (line 4). One of the objectives of this present study was to compare the results with Tanaka's findings; therefore, I will adopt these criteria for turn-final vs. turn-initial division. Some examples of the data of this study for each context (the dialect *na* use) are shown below:

Example (1) *na* turn-internal
(Mother-Daughter)
1. Mother: moo [redacted], ima [redacted], taberu mon toka okuttatte na =
2. Daughter: =°n °
3. Mother: koota hoo ga toku ya =
4. Daughter: =un

1. Mother: already *na* right now *na*, sending food and stuff *na* =
2. Daughter: =uh-huh
3. Mother: much cheaper if you buy them =
4. Daughter: =yeah

Example (2) *na* turn-final
(Clinic)
1. Nurse-K : a- ano na, sanrinsha to, =
2. Doctor : =un
3. Nurse-K : shinkansen. kore wa((0.2)) ashi deta [redacted].
4. Nurse-J : [se yaro, deta yaro?
5. Doctor : [un se ya::

1. Nurse-K: uh- uhm *na*, tricycle and, =
2. Doctor: =un
3. Nurse-K: bullet train this one is ((0.2)) we lost profit *na*
4. Nurse-J: [see right, lost some right?
5. Doctor: [yeah that's right::

Example (3) *na* turn-final
(Dance)
1. H: odori =
2. B: =ho::nto.
3. H: iya iroiro suru kedo [redacted]
4. B: un
5. ((0.2))
6. H: kono kai wa sakura goyomi tte iyu te ne =
7. B: =un

1. H: dancing=
2. B: =really.
3. H: well we do various things *na*
4. B: yeah
5. ((0.2))
6. H: this recital is called *sakura goyomi ne* =
7. B: =un

3.0. ANALYSIS

3.1. QUANTITATIVE RESULTS

Table 2 below shows the total tokens found in the examined data. The sub-totals for each loci of occurrence of *na* and *ne* are also shown in the same table.

TABLE 2. Total Tokens of na and ne in the Three Contexts

	Clinic		Mother-Daughter		Dance Group		total
[redacted]	11 (F-4: I-7: In-0: Fu-0)	23%	10 (F-8: I-2: In-0: Fu-0)	11%	18 (F-8: I-8: In-0: Fu-2)	54.5%	38
[redacted]	37 (F-16: I-19:In-1:Fu-1)	77%	85(F-45: I-40: In-0:Fu-0)	89%	15 (F-11: I-4: In-0: Fu-0)	45.5%	137
total	48 tokens	100%	95 tokens	100%	33 tokens	100%	175

F: turn-final position **I**: turn-internal position **In**: turn-initial position **Fu**: entire turn

There were fewer tokens of *ne* or *na* in the Dance Group data. This is because the conversations occurred sporadically, and there were some spaces between these "chatting" sub-events during the whole 25 minutes. Compared to these, the other two contexts in which the participants were engaged in talk occurred mostly throughout the recorded period of time.

As we see in the table, the distribution of *na* and *ne* differs radically among the three contexts. Use of *na* was more frequent in the Clinic data and Mother-Daughter data, whereas *ne* usage was slightly more frequent in the Dance Group data. In terms of the loci of *na* or *ne*, I found that the occurrence of either *na* or *ne* as 1) an entire turn (1 token of *na* in the Clinic data, and 2 tokens of *ne* in the Dance Group data), and 2) turn-initial (only 1 token of *na* in the Clinic data) is very rare. Both *na* and *ne* seem to appear both in the turn-final position and the turn-internal position.

3.2. CONVERSATION ANALYTIC APPROACH

3.2.1. EXAMINATION OF TURN-ORGANIZATION BY NA AND NE

First, the occurrences of *na* and *ne* were examined in terms of their placement in relation to a turn unit. Adopting Tanaka's (2000) methodology, the analysis also looked at 1) turn-management operations performed by *na* and/or *ne*, and 2) actions that were accomplished through such operations of *na* and/or *ne* (page 1141). In a nutshell, **no differences were found between *na* and *ne* as a conversational management**. The followings are some of the examples for turn-final and turn-initial *na* and *ne*, illustrating my findings.

TURN-FINAL POSITION

Example (4) Clinic Data
(talking about Nurse-K's experience in participating in a swap meat)
1. Nurse-K : toshiyori no hito nanka, 10-en ya te sore daijyoobu? tte sonna shina utte n non tte =
2. Nurse-J : =un
3. Nurse-K : kaette na, henna mono utte n chau ka tte omou:: okashi omowa-haru n.
4. Nurse-J : dakara zuuzuushii XX omowa-haru datte [=
5. Nurse-J : =200-en gurai ya kara [.
6. Nurse-K : soo nan. yas- soo suru wa.

English Translation
1. Nurse-K : the elderly people for example would say, "you say 10-yen, are they okay?" "You sell such (cheap) stuff? =
2. Nurse-J : =yeah
3. Nurse-K: they would rather wonder if you are selling defective stuff:: they would think it's strange.
4. Nurse-J: so they'd think you are shameless, XX you see=
5. Nurse-J: =200-yen would be just right, isn't it?
6. Nurse-K: is that so. I will make it cheaper.

Lines 4 through 5, the utterances by Nurse-J, shows the *na* occurrence in the turn-final position. As Tanaka (2000) suggests, a turn-final FP marks a possible transition-relevant place (TRP), hence there tends to be speaker change after its occurrence (p.1141). In line 6, after the occurrence of turn-final *na* in line 5, Nurse-K engages the speaker change by responding to Nurse-J *'Is that so. I will make it cheaper.'* J's response here is agreeing with K's utterance, which is one of the actions associated with the use of *ne*. In other words, *na* in this example is functioning very similarly to *ne* as shown in Tanaka's study. *Na* in line 4 is also in a turn-final position yet it does not trigger speaker change, because the utterance *omowaharu datte na* was produced very quickly, latching onto her next word *200-en* '200-yen.' Ford & Mori (1994) analyzes one of the conversational functions of *datte*, a Japanese causal connector, as introducing an account in disagreement situations (p.44). Given this account, *datte* in line 4 clearly shows Nurse-J was not finished with her turn. This 'rush-through' strategy (Schegloff, 1972), along with the use of causal connector prevented the speaker change; as pointed out in Tanaka (ibid.), we can say that turn-final position *na* also marks TCU (Turn constructional unit), just as *ne*.

TURN-INTERNAL POSITION

Here is an example from the telephone interaction, showing turn-internal *na* as well as *ne*:

Example (5) Mother-Daughter Telephone Data
(mother is talking about a plan for New Year's party)
1. M: seya kedo shinenkai tte yuu n wa uchiuchi yakara [=
2. D: [un
3. M: =XX ya kedo Ginga no Ma yuu te =
4. D: =un
5. M: chotto shita shoo-hooru mitai na kanji ya ka =
6. D: =un
7. M: sokode uchiuchi no mon bakkari de:: shinnenkai [yakara
8. D: [funfunfunfun
9. M: ano::yoso kara kuru mon yuutara ano: [:
10. D: [otomodachi toka=
11. M: =XX choo no [XX yuu toko an =
12. D: [° n ° =un un shitteru [yo
13. M: [so- sokkara ano::
14. M: XX kai no hito =[mi ni kuru [wa. maitoshi [
15. D: =fu[n [fu:n [fu:n

1. M: But the New Year's party is a very inside matter [*na*=
2. D: [yeah
3. M: =it's XX, but they call it *Ginga no Ma*, *ne* =
4. D: =yeah
5. M: it looks like a small recital hall, you see=
6. D: =yeah
7. M: there, only the people who are in the group, ['cause it's New Year's party
8. D: [funfunfunfu*n*
9. M: well::, the people who come from other places would be, well:[:
10. D: [like friends=
11. M: =there is [*na* XX (place name) in XX town, [right
12. D: [° n °
13. M: [yeah, [I know.
14. M: people from the XX group = [they come to see [us. every year[*ne.*
15. D: = fu[n [fu:n [fu:n

According to Tanaka's (ibid.) analysis of *ne*, turn-internal *ne* marks an acknowledgement relevant place, inviting the primary recipient to send out a backchanneling response. It enables the speaker to maintain or end the speakership, or hold the floor (Hayashi, 1994). Here the mother provides a stream of information about her plan for the New Year's party without allowing the daughter to shift the topic, in other words she maintained the floor despite the frequent overlapping 'lexical' reactive tokens (Iwasaki, 1997) of the daughter. In the example above, four turn-internal final sentential particles (*na* in line 1, 11, and 14: *ne* in line 3)[5]were all followed by the daughter's either latching or overlapping response. Line 11 has a lexical reactive token *un shitteru yo* 'Yeah I know,' overlapping with the mother's utterance. What is interesting here is that the mother's next turn *so- sokkara ano::* overlaps with it. There are two features to be mentioned about this utterance. First, *so-* is a self-repair of *sokkara* 'from there,' and *ano::* has an elongation of the last vowel. These two strategies are used when the speaker is engaged in a turn-sustaining act (Bilmes, 1997). This is also suggestive evidence for the analysis of this piece of interaction.

With the observation given as such, I argue that Tanaka's approach simply lead us to the conclusion that *na* and *ne* appear in the same loci. As we have seen here, under Tanaka's analysis which focuses on mere turn-organization system at a very local site, there is no difference between *na* and *ne* in terms of what they enable the participants to accomplish. However, there is a further probing question upon this finding: why do these participants use two devices, namely *na* and *ne*, even in the same interactional occasions? The preliminary answer to this question is that the *na* and *ne* are NOT the same. Here we need to move onto another level of analysis of the data, in other words to examine the social consequentiality of the interaction. In the following analysis, I will revisit the data by taking into consideration aspects beyond the examination of turn-organization. What I had aimed to do here can be also seen as an engagement in what Duranti (1997) called "widening the context."

3.2.2. RE-EXAMINATION OF THE DATA
NA AND *NE* AS A RECIPIENT SELECTION DEVICE

One way to expand our interpretation of the text is to take **participation framework** (Goffman, 1974; 1981) into consideration. In a multi-party setting like the Clinic Data, there were clear cases where the mix of *na* and *ne* aided the participants in establishing "ratified" recipients versus "unratified" recipients (Goffman, 1981). See the example (6) from the Clinic data below for an illustration:

Example (6) (Nurse-J is talking about her shopping event to K and Doctor. Patient H is sitting on a chair, and Doctor is treating her knee)

1. Nurse-K: jaa dareka watashi o tomete!
2. Doctor: (laugh)
3. Nurse-J : are kate 1500-en de tai naa te watashi yametara
4. Nurse-J : "un ureta yo 200-en de utta toka yuute =
5. Doctor: =un
6. Doctor: akan katta [redacted] =
7. Patient H : =kono hen ni arimasu nen. shiranai.

Nurse K and J talking in the back (not decodable)

8. Doctor: deteta n chau ka, koko?
9. Patient H: detehen ude no hoo ga.

(According to the retrospective observation of H, the doctor was treating her knee throughout the whole interaction, even before he started talking to H.)

1. Nurse-K: then someone, stop me!
2. Doctor: (laugh)
3. Nurse-J: that one cost 1500-yen, I thought it's expensive and gave up on it
4. Nurse-J : they said "we sold it for 200-yen"=
5. Doctor : =yeah
6. Doctor : it didn't work, *ne* =
7. Patient H: =but there are (some pains) strangely. I'm not sure.
8. Doctor: was it exposed to the outside, right here? (pointing out her knee)
9. Patient H: No, it wasn't. My arm was.

As indicated in the example, there are four people present in this piece of interaction. First the two nurses and the doctor were taking the primary role in interaction (line 1-5), and the patient H is present yet not verbally participating in it. To use Goffman's term, H is the bystander, and she opted not to become part of the peripheral participants. In line 6, the doctor turns to H, saying *akan katta* ***ne*** "it didn't work, ***ne***." Immediately after (and latching) the doctor's turn, patient H verbally responds to the doctor, now playing the role of the primary recipient of the interaction. Simultaneously the two nurses who used to be engaged in the chat with the doctor turn away (in a literal *and* metaphorical sense) from him and initiate a dyadic sub-communication or by-play (Goffman, 1981). According to patient H, the doctor was treating her knee throughout the whole interaction, even before he started talking to H. From the doctor's utterance in line 6, with the use of the standard *ne*, all the participants of this particular interaction understood the change of interactional roles; from line 6 and beyond, the ratified recipient was shifted from the nurses (and the doctor) to patient H. What we can say here is that the *ne* occurred exactly where there was a change in the participation framework. The interactions amongst the nurses and the doctor in the analyzed data show that they use *na* particle more frequently than *ne* to each other, as typically found in example 4 earlier. With that in mind, we can see that the shift from *na* to *ne* found in this particular piece of data brought out a "frame shift," and all the participants in the interaction seem to show a tacit knowledge of it, by behaving as the ratified or non-ratified interlocutors such a shift assigns. The function of *ne* as recipient selection was often (but not solely) utilized by the doctor in the analyzed data. For his necessity to run his medical practice as well as the interpersonal communication with the patients, the style shift of interactional particles was strategically performed.

Let us examine example (7), which is an excerpt of the doctor's personal narrative. Despite the presence of two nurses in addition to the patients, only the patients H and S sent out listener responses to him.

Example (7)

(Doctor is speaking to two patients about his memory from 10 years ago)

1. Doctor: ano [redacted] mukashi, koko nan-nen ka mae kana. ano MAKURAGI ga
2. Doctor: ki: yatta toki atta desho =
3. Patient H: =un
4. Doctor: ano toki wa urusakatta wa
5. Patient S: ° a::°
6. Doctor : honra moo makuragi no ki: no toki wa moo taihen deshita yo.
7. (0.3)
8. Doctor: hona kokora demo densha tootta toki demo honra moo hanashi dekimasen
9. Patient H: he::
10. Doctor: un (2.0) kara uttoko mo Nishiura ni sundeta toki ni [redacted]
11. Patient H: un
12. Doctor: densha no ma:yoko yatte [n =Sora: urusai, terebi no oto wa kikoe-hen shi [redacted]
13. Patient H: [un =
14. Doctor: tsuki ni ikkai yonaka, seya [redacted], ano 5ji 4ji gurai ya a [no
15. Patient H: [un

16. Doctor: XXX no densha ga h [ashin nen=horra urusai urusai
17. Patient S: [a::::::::::::=

1. Doctor: You know *ne*: a long time ago, some years ago, maybe. There were times when the ties for the railroads were
2. Doctor: woods:, right?=
3. Patient H: =un
4. Doctor: those times it was so loud
5. Patient S: ° a::°
6. Doctor: when they were woods, it was so troublesome *yo*.
7. (0.3)
8. Doctor: see around here too, when the trains passed by we couldn't talk.
9. Patient H: he::
10. Doctor: un (2.0) so when my family lived in Nishiura *ne*
11. Patient H: un
12. Doctor: We were right next to the train[s =it was so laud, we couldn't hear the TV *ne*
13. Patient H: [un =
14. Doctor: once a month, so well *ne*, right about 5 or 4 o'clock ri[ght
15. Patient H: [un
16. Doctor : the trains from XXX used to pa[ss by us = It was soo loud
17. Patient S: [a::::::::::=

This is also a piece of evidence illustrating the situational effect brought out by the usage of standard particle *ne*, instead of dialectal form *na*.

4.0. *Na-to-Ne* SHIFT AS A DEVICE TO DO "AUTHORITATIVE" SPEAKER ROLE

With the Clinic data, I have described the establishment of a participation framework in terms of ratified/unratified recipients. In a dyad setting like the Mother-Daughter telephone Data, the participation framework can be seen from another angle; what seems to be more of an issue there is to determine who sustains the floor (Edelsky, 1989; Hayashi, 1994). Obviously, it is not difficult for both the participants to address their interlocutor. However, there seems to be on-going negotiation when it comes to who becomes 1) the primary speaker, and 2) the speaker with more authority between the two. The former problem was the issue discussed in Takana's study (2000), whereas the latter problem has not been previously addressed in the literature. In the mother-daughter interaction, one finds the mother engaged in gaining the floor back upon the daughter's attempts at a speaker change through the strategic use of *ne,* or rather the shift from *na* to *ne* by the same speaker in the single spate of talk. See example (8) below for an illustration:

Example (8) Mother-Daughter Telephone Data
(Mother is talking to Daughter about a plan for New Year's party)
16. M: ano:: yoso kara kuru mon yuu ta[ra ano::
17. D: [otomodachi toka=
18. M: =XX choo no [[redacted] XX yuu toko aru [redacted] =
19. D: [° n °
20. M: =un un shit [teru yo
21. M: [so- sokkara ano::=
22. M: =XX kai no hito [redacted] =
23. D: =fu[n
24. M: [mi ni kuru [wa. maitoshi [[redacted].
25. D: [fu:n [fu:n

16. M: well:: if you mean people coming from other cl[ubs then::
17. D: [friends or something=
18. M: =there is a place called XX [***na*** in XX town *ne* =
19. D: [° yeah ° = yeah yeah I k[now
20. M: [from there well::

21. M: =people from the XX club ***na*** =
22. D: =fu[n
23. M: [they'll come and [see. every year[***ne***.
24. D: [fun [fun

In this interaction, competition for the floor is observed throughout. For instance, the mother continues her talk about how a normal New Year's party among her friends is conducted. In line 17, the daughter co-constructs the mother's attempts to complete the turn for her by overlapping the mother's turn *yuu tara* 'when you say.' Upon this occurrence of overlap, the mother inserts a filler *ano::* (line 16) with elongation of vowel, which seems to suggest that she treats the daughter's overlap as an "interruption" (Bilmes, 1997). When the daughter responds to her mother in line 19 with a lexical reactive response *un un shitteru yo* 'yeah yeah I know'; the mother false starts her turn in line 20 (and overlaps partially with her daughter's utterance in line 19), and waits until the daughter finishes her response to actually start up again with her meaningful message (line 21). This is also another clear example of an interactional act of "being interrupted" (Bilmes, 1997).

Now that we observe the competition for the floor between Mother and Daughter interaction here, let us see the two occasions of *na* to *ne* shift. We find the first *na* to *ne* shift in the immediately following turns. In line 18, Mother used one token of turn-internal *na* at the first TCU (turn constructional unit), then she shifted to *ne* in the second TCU as in *XX yuutoko aru ne* 'There is a place called XX.' In line 21 and 23, the second shift from *na* to *ne* occurred. Along with this Mother's utterance, Daughter now sends out a minimum response *fun* overlapping at the end of each TCU of Mother's turn (line 24). At this point Daughter displays that she is now dominantly playing the listener role, letting the mother be the ratified, authoritative speaker[6]

Mother's strategic use of *na to ne* is also found in example 9:

Example (9) (mother just told the daughter that she is involved in a recital)

1. D: shikai yuutara okaasan are nan maiku de shaberan nan akan non
2. M: he?
3. D: shikai yuutara [redacted] =
4. M: =shikai wa maiku ya. shikai de nakatte n.
5. (0.5)
6. **M**: shikai wa sende ii kedo ya [redacted]
7. D: nani o sena akan katte n [ya
8. **M**: [shin- shinkoo-gakari yuu tara [redacted]
9. M: tugi no hito [o] [soo ya kedo=
10. D: [yo]bana [akan non

1. D: when you say emcee, mom, is it, that you need to speak through a microphone?
2. M: what?
3. D: when you say emcee ***na***=
4. M: =you speak via microphone if you are the emcee. I wasn't.
5. (0.5)
6. M: I didn't have to do the mcee, but ***na***
7. D: what did you have to do [*ya* ((interactive particle))
8. M: [the- the facilitator, that means ***ne***
9. D: the next perso[n] [that's right but =
10. M: [yo]u call for [you need to, right

In this example, Daughter first asked Mother in line 1 whether Mother had to speak through a microphone when she emceed (as indicated in Mother's talk in prior to this excerpt). It turned out, as we can see in the following sequence, that Mother did *not* play an emcee role, instead she acted as *shinkoo-gakari* (facilitator). Mother latches to Daughter to engage in repairing the misunderstanding, as found in line 4 *shikai de nakatte n* "I wasn't (the emcee)." This utterance met with a 0.5 pause, and Daughter's re-formulation of the question in line 7 *nani o sena akan katte n ya* "What did you have to do (then)?" The use of *n* + *ya* (Osaka dialect for N/AN-da/datta "copulative auxiliary")[7]as well as the intonational delivery of this question by

Daughter audibly indicates that she seeks a quick repair of information from Mother, and it was heard as such by Mother. In the immediately following turn, in line 8 Mother starts her turn by overlapping with Daughter's turn, saying *shin- shinkoo-gakari yuu tara* ***ne*** "faci- facilitator means *ne*" Here we see Mother's usage of standard interactional particle *ne*. From line 8 and beyond, Mother continues telling Daughter what a facilitator does in a dance recital. Line 9 shows Daughter is now engaged in co-construction of Mother's telling, which is a behavior of a ratified listener role in interaction.

5.0. *Ne-to-Na* AS A DEVICE TO DO "AUTHORITATIVE" SPEAKER ROLE

Turning our discussion to the dance group data, which is another multi-party setting like the Clinic data, we find yet another kind of participant framework established through interaction. See example (10) below:

Example (10) Dance Group Data
(H is talking about her next recital to B)

1. H: watashi mata MM-san to pea:: de odoru nen
2. B: a honto:: un
3. H: ano hito otoko. watashi onna.
4. B: a honto:: un un un
5. H: onna no hito ga koo [ ] = mawan nen kedo [ ] =
6. B: =un =un
7. B: a ho:n to. chotto semai- semai yatsu [ ]
8. H: onna no hoo wa chiisai hoo ga XX kara [ ]
9. B: un. a ho:nto.

1. H: I am going to perform pairing up with MM-san.
2. B: oh really.
3. H: she is the man role, and I am the women role.
4. B: really. un un un
5. H: the women role is like this *ne* = turn like this, *ne* =
6. B: =un =un
7. B: really. The one (=a turn) a bit narrower *ne*
8. H the women role is better if you are smaller *ne*
9. B: un. oh really.

As we see in the first part of the example (10) here, the participants (classmates in the dance class) use *ne* extensively to each other. The quantitative data also showed that there were more uses of *ne* in this context as a whole compared to the other two speech situations. If we think back on how *na* was used dominantly between the nurses and the doctor and between mother and daughter, this finding is rather a marked one. Furthermore, it should be discussed further that H appears in all three situations and that she seems to show a very different distribution of *na* and *ne* depending on what is "normative" or common practice in each context. What this may suggest is that all three speech situations may have a locally established particular *practice* (Lave & Wenger, 1991) of language use, possibly different from each other. H has already established herself as a core member of all the relevant speech communities, hence she shows fluent participation in the expected manner of the interaction.

Within the Dance Group data, there were occasional uses of style shift from *ne* to *na* as shown in the example below:

Example (11) Dance Group data
(The dance teacher is talking to the students about her meeting with other dance teachers)

1. A: dakara [ ] =watashi wa [ ] =
2. C: =un =un
3. A: XXX ni kiteru n yakara (2.0) betsu ni nan- nantomo nai de. (0.3)
4. C: u:::n nantomo nai kana?=
5. A: =de [ ]=

6. C: =un
7. A: XXsensei-gata no hoo kate [redacted] =
8. H: =un

1. A: so *ne* = I am *ne*=
2. C: =un =un
3. A: I've come all the way to XXX (2.0) it doesn't matter to me at all.. (0.3)
4. C: well, I wonder it really doesn't matter? =
5. A:
6. C: =and *na* =
7. A: they say it that way (0.3) but I at least mentioned that to them =
8. H: =un

H and C are students in the dance class, and A is the dance instructor. Besides these three participants, B was also nearby, eavesdropping on the conversation. This interaction took place very soon after example (10). The instructor A was a bystander in example (10), but in line 1 of this example (11) she grabbed her turn by saying *dakara* ***ne*** 'so ***ne,***' which immediately achieves C's listener response, in other words C shows her " recipientship" to A. As you see in this example, it was very fast and easy for A to gain and sustain her speakership; we notice the long pause within her turn (e.g., in line 3, 2.0 second pause) yet nobody else jumps in to carry out a speaker change. In line 5 and 7, A (instructor) uses *na* turn-internally, in line 9, turn-finally. Throughout this selection of the data, the instructor A is the dominant agent for the shift from *ne* to *na*, or sole user of dialectal particle *na*. A's usage of *na* was not reciprocally responded to by *na* in the recipients' turns; we can conclude from such an observation that the use of *na* is limited to a particular participant (A) in this specific interaction. Interviewing H regarding A's social role as the instructor (*shishoo*), she mentioned that others tend to cease their own private chatting and automatically "listen" or yield the speakership to A even at their break time. In the discourse data such as example (11), we can see how A's authoritative role as the teacher has been established via local particulars; the pattern we saw in (11) is illustrative of how a macro-level social scene is being constituted through micro-level interactional practice. The use of *na*, or a shift from *ne* to *na*, seems to be attributive of such interactional practice for the participants. Here we see the instructor's interactional strategy of doing an "authoritative speaker" via the use of *na*.

What is interesting in comparing the data from Mother-Daughter interaction and from the Dance Class interaction is that a very similar interactive accomplishment was obtained through a different direction of shift. Observations of these two situations seem to tell us that it is a pattern of "practice" that *na* is used most dominantly in Mother-Daughter conversations, while *ne* is used as the "default" interactional particle among members of the dance class.

In this paper, an ethnographic approach was incorporated into the analysis of conversation to find out what is the "default" or a normative practice in a particular speech community. Without information gained from observations of the target speech communities, the variable particle shifts we witness in the data cannot be teased apart; furthermore, it becomes very difficult to see how participants in the talk themselves acknowledge and mark their talk as "talk-in-a-setting" (Edward, 1997:85), as orienting to pre-established roles and privileges, or what kind of social action is being accomplished. Returning to the "issue of relevance" (Schegloff, 1991) here, I argue that there is a need for widening the context to determine what is relevant for the participants.

6.0. CONCLUSION

In this study, I have divided the methods of examining the discourse data in two steps. First, I have shown the turn-organizational functions of dialectal *na* and standard *ne* used by the participants in the data, and the results were concurrent with what has been suggested in the previous studies (especially in reference to Tanaka, 2000). In the second step, I have extended the examination of consequentiality of interaction (Schegloff, 1991) to discuss the accomplished participation framework (Goffman, 1974; 1981), or the assignment of speakership/listenership in the interaction via *ne/na* shifts found in the data. Furthermore, I considered the social consequentiality of such an interactional accomplishment, particularly the *ne/na* shift that was strategically used by the participant who became the authoritative speaker in the interaction. By "widening the context," with ethnographic observations, it was found that the three different speech situations in this study

showed different manifestations of *ne/na* usage, according to the normative practice established in each community. In this study, I have emphasized the argument that microanalysis of conversation can be enriched by integrating ethnographic research, when it is conducted by very carefully reaching outward to find the "relevant" socio-cultural context.

Keys for the Transcription

( ) : comments on non-linguistic observations e.g. laugh, movements, a timed pause
CAP: louder in volume
? : rising intonation . falling intonation
° xx ° : spoken quietly (whispered)
xx =
=yy : xx and yy are latching
[xxx
[yyy : onset of the overlap of xxx and yyy
x: sound stretch XX : proper names (name of a person, a place etc)

NOTES

1. In the previous literature, ne (in case of Osaka dialect, na) has been described as "sentence final particle." This label is misleading when we examine the placement of ne (na) as discussed in Tanaka (2000) and in this paper. In conversational data, a unit such as a "sentence" (in syntactic sense) is hard to apply. Rather, the placement of ne (na) can be found around a "turn," as in "turn-final/ initial." Okamoto (2003; forthcoming) suggests "interactional particle" as a better fit to capture the behavior of ne (na), and I also adopted such a label here.
2. This particular clinic offers physical therapy (including chiropractic therapy) to the patients. Many of them commute the clinic regularly for treatment of their various problems, such as whiplash injury or constant headaches. Patient population varies in age. There are two regular female nurses (assistants), and a male doctor in the clinic. Although examinations are conducted in an individual room, many procedures of therapy require machines/exercise machines, which are located in a large room in the building. The recording for this study was done in this particular location.
3. Each lesson is conduced in a large tatami floored room, in which the students and the teacher take a 15 minute break every 45 minutes. The data were gathered from two breaks over two lessons.
4. Extensive intermixed use of the standard variety and the dialect of Japanese has been discussed amongst Japanese sociolinguists (Inoue, 1986, 1996; Sanada, 1987, 1999) For example, one describes a study in which an Osaka dialect speaker living in Osaka (in her 40's) switches her use of standard and dialectal conjunction forms (e.g. dakara kedo vs. sakai, seyakedo) according to whom she speaks.-
5. ne in line 11 and line14 were recognized as turn-final tokens in this study.
6. Itakura (2001), examining conversational data gathered in Japanese L1 and English L2 Conversations between male and female Japanese speakers, shows how one of the dyad participants achieves 'sequential dominance,' via applying strategies such as overlapping, interruption of the other's speech, and topic control.
7. I adopt Okamoto (2003)'s category here.

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GRAMMATICALIZATION OF KOREAN CAUSAL CONNECTIVE NI & NIKKA AND THE ROLE OF -KKA

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1.0. INTRODUCTION

Grammaticalization is defined as an evolution whereby linguistic units lose semantic complexity, pragmatic significance, syntactic freedom, and phonetic substance. (Heine & Reh, 1984) Thus, grammaticalization processes, which are essentially unidirectional, involve three correlated essential components: meaning (semantic-pragmatic) shift; structural reanalysis (or grammatical restructuring); and phonological change (Heine and Reh 1984; Lehmann 1985; Hopper & Traugott 1993). Unidirectionality of meaning refers to a shift that gradually moves toward a semantic-pragmatic abstractness: propositional > textual > expressive (Traugott 1982, 1988, 1989; Traugott and Heine 1991). In other words, meaning shifts move from an objective and referential meaning towards a more subjective, speaker-oriented attitude and point of view, but not in the reverse direction.

In this light, the aim of the paper is to investigate the grammaticalization process and the semantic shift involved in the development of the Korean causal connective *-nikka*. In this paper, we will first distinguish the semantic properties of *-ni* and *-nikka* by comparing data from the 15th & 16th century (Huh, 1989) and present day Korean (PDK). We will then attempt to investigate a particular role of the morpheme *-kka* in the connective particle *–nikka,* as well as its role in the sentence final ender, *-nikka*. Finally, we will discuss the grammaticalization shifts of *–nikka* and *-ni* from clause subordinators to interactive sentence enders which behave as independent clauses. Furthermore, this paper will also investigate the possible motivation that triggered this grammaticalization.

2.0. THE REVIEW OF *–NIKKA*

The Korean connective *-nikka* has been defined as a marker of causality, temporal sequence and / or discovery. In the scholarly literature examining *–nikka*, authors have applied a variety of perspectives and have highlighted different aspects of this connective particle. For instance, *-nikka* has often been examined by comparing it with another causal connective *–ese* in an attempt to identify the relationship between the clauses linked by each particle (K. Lee, 1988; Lukoff & Nam, 1982; Ree, 1978; S-O. Sohn, 1992). The findings of these studies indicate that *–nikka* is generally more subjective in nature, speaker-oriented, and pragmatically conditioned in its use, whereas *-ese* is event-oriented and more objective in marking the inter-clausal relationship such as sequentiality of events and/or its direct causality.

With evidence from semantic, morphological, and discoursal features of *–nikka,* S-O. Sohn (1993) points out a similarity between its characteristics and the NP topic marker *nun:* "Like NP topics, the proposition of a *–nikka* clause is definite, discourse-dependent, presupposed, and sets a domain for the following prediction." (1993: 94)

(1) a. *ency ka-ss-u*nikka* cikum o-ni?
*when-go-Pst-*nikka* now come-Int?
'When did you go and come?'

b. A: appa cengmal kanunke-ya?
father really go-Q?
'Father, are (we) really going?'
B: ung. kan-ta-*nikka.*
yes go Qt-*nikka.*
'Yes, I told you already we are going.'

c. sacin-ul chac-ko po-*nikka*, swuswul cen pota cogaci-ess-nuntey.
picture-Acc find out see-*nikka* operation before compare to better-Pst-Int.
'When I keep looking at the picture, she looks better than before the surgery.'

d. cip-ey ka-*nikka*-nun pheynci-ka wa iss-te-la
house-to go-*nikka*-Top letter-Nom come be-Pst-Retro-Dc
'When I went home, (I found out that) the letter was there.'

S-O. Sohn explains the definiteness of *–nikka* by proposing evidence that *–nikka*, like topic marker *–nun*, cannot be used with *wh*-words as in 1a. Secondly, when *–nikka* is used in the sentence final position, the discourse role of *–nikka* is to recapitulate previously mentioned information and bring it back into focus, hence marking the entity of clause-*nikka* as the center of attention (1b). Third, the *-nikka* clause, like NP topics, constitute the framework which has been selected for it to be further discussed. In the 1c, the role of *–nikka* is to link the preceding clause with the clause to which it is attached and to set a domain which the following clause comments on. Finally, with the evidence *–nikka* can be attached to topic marker *–nun*, Sohn pointed out that the similarity between *–nikka* and topic marker *–nun*.

The author proposes that the two functions of *–nikka* (causal and temporal), demonstrate the speaker's own subjective judgment / perception, otherwise known as 'phenomenal knowledge' (cf. Goldsmith and Woisetschlaeger, 1982). From this point of view, the connective *–nikka* is interactive and interpersonal in nature which (1) marks a causal relation as a phenomenal description, which is directly associated with the speaker's own perception, and (2) sets up a temporal domain with a sense of discovery and realization. Moreover, regarding *-nikka* clauses where both temporal and causal functions appear, S-O. Sohn suggests that although the two clauses do not seem to be related, they are in fact affixed as a result of the phenomenal nature of human cognition. The function of *–nikka* in (2) can be ambiguous between temporal and causal interpretation;

(2) mul-i yengto-ka toy-*nikka* el-ess-ta
water-Nom zero-degree-Nom become-*nikka* freeze-Pst-Dc
'When the water became zero degrees, it froze.'

On the other hand, studies by Kim & Suh (1993, 1994) explore the meaning of *-nikka* by analyzing discourse data to explicate the interactional motivations that underlie the various functions of *nikka*-clauses (1994). In this study, the authors identify four types of contexts that the *nikka*-clause provides: (1) an affective ground for eliciting co-alignment and sympathy of the interlocutor; (2) empirical ground for conveying disagreement obliquely; (3) a textual ground on which the speaker positions the hearer as the recipient of the extended talk or for projecting upshot in the middle of the story on which the hearers are led to orient and prepare themselves for what the speaker is going to tell; and (4) an empirical ground for justifying the preceding action in which the speaker mitigates the degree of dispreferredness by inviting from the interlocutors a more favorable evaluation thereof. They conclude that *–nikka* functions "as a device by which speakers impose their action on the interlocutor to effect some change in the interlocutor's stance, i.e. to upgrade or modify the degree of appreciation and responsiveness expected of the interlocutor into a more agreeable one." (1994: 127)

As can be seen above, various views and interpretations of *–nikka* in terms of its semantic and pragmatic functions are proposed. That is, besides its basic function as the marker of causality, temporal sequence and discovery, the authors point out the interactional and subjective motivations that lie beneath the functions of *–nikka* clauses. However, it may be that it is not the semantic development of *–ni* that brings about these findings, but rather the morpheme *–kka* that results in the analysis of *–nikka* as subjective, interpersonal, and interactive in nature. Thus, it is worth investigating the roles and functions of *–kka* separate from *–ni*. In the same way, although *-ni* and *–nikka* are related and tend to have similar functions, they should not be assumed to be the same, but should also be closely examined separately.

3.0. *–NI* VS *–NIKKA*

According to standard Korean dictionaries, *-nikka* is defined as an emphatic form of *-ni*. If so, this means that *-nikka* and *–ni* should have similar functions and be interchangeable. On the contrary, as many scholars point out, *-nikka* and *–ni* cannot be substituted in all cases (Nam 1983, Suh 1988). For example, Nam (1993) asserts that *–ni* and *–nikka* are not variations of the same morpheme but rather two separate morphemes. However, given the fact that *–ni* and *–nikka* share the basic functions (i.e. casualty, temporal sequence) in many cases, it cannot be assumed that they are completely separate morphemes. Sohn (1999) suggested that *–ni* must

have been grammaticalized from *–nikka,* giving the example that the retrospective *–te* can only be attached to *–ni* but not *–nikka*. Although this suggestion concurs with the general unidirectional phenomenon of morphological reduction, given the fact that *–nikka* is not attested to in the linguistic data of early texts, it is likely that *–nikka* may have been developed from *–ni*. In other words, since *–nikka* is more prevalent than *-ni* in contemporary Korean and the use of *–ni* is more restricted to formal and written context, it is likely that *-nikka* may have been grammaticalized from *–ni* and *–kka* in which *–kka* was a separate morpheme.

3.1. SEMANTIC PROPERTIES OF *-NI* AND *-NIKKA*

Both *–ni* and *–nikka* are frequently used as causal connectives in PDK. While *–ni* is used more in written texts, *-nikka* is used more interactively in speech.

(3) Onul-un nae-ka pappu-ni/*-nikka* nolle kal swu-ka eps-ta
today-Top I-Nom busy ni.*nikka* play go way-Nom lack-Dc
'Because I am busy today, I cannot go out to play.'

However, according to the data from the 15th, 16th century, neither *–nikka* nor any prototypical form of *–nikka* were found. In PDK, even though *–nikka* is used frequently in spoken conversation, its frequency in formal speech or written texts is still relatively low. In the study by Kim (1983), data from Korean text books and spoken narrative were examined to identify the frequency of different causal connectives in Korean. Results showed that out of 103 cases in written texts, and 97 cases in spoken data, *-nikka* had the second highest frequency (9.7% in written and 22.8% in spoken) among causal connectives next to *–ese* (48.5% in written and 75.2% in spoken). Furthermore, *–ni* was not found in the spoken data and only appeared 8 times (7.8%) in written data. Although writing conventions do not change as rapidly as speech forms, it is probable that like the spoken form, the causal connective *–ni* may eventually be replaced by *–nikka* in the written form.

Besides the causative meaning, *-ni* and *-nikka* also have the semantic meaning of realization, discovery, and argumentation (Nam, 1993). That is, *-ni* and *–nikka* connect two clauses of which, as a result of the preceding clause, the speaker discovers or realizes a fact in the following clause.

(4) a. mwul-ey son-ul neh-e po-*ni/nikka* nemwu chaka-we.
water to hand Acc put see-*nikka* very cold-Dc
'When I put my hand in the water, (I found out that) it was very cold.'
b. cip-ey o-*ni/nikka* amwu-to eps-ess-ta.
home to come-*nikka* nobody-also not being Pst Dec
'When I returned home, (I found out that) nobody was at home.'

In the above examples, there is no direct causal relationship between preceding and main clauses of *–ni/-nikka*. However, in this case, *-ni/nikka* does not simply connect the two events, but shows a rather weak cause and effect relationship in that without the first clause, the proportion expressed by the second clause cannot be realized by the speaker.

The third general function of *–ni* is to mark a temporal sequence of two events or to indicate a cognitive sequence to provide further information. When *–ni* is used to only mark sequence, it cannot be substituted by *–nikka* as in the examples below. Since there was a high frequency of the temporal function in *–ni* from 15th and 16th century texts, we can infer that the original function and meaning of *–ni* is to indicate sequentiality.

(5) a. salibwul-i hAn saca-lAl cizenas-*ni/*-nikka* ku syo-lAl cap-amek-*uni* moda nilo…
Buddah-Nom one lion-Acc make–ni/**nikka* that bull-Acc catch eat-uni everyone says
'Buddha made a lion, and then (the lion) ate the cow and then everybody talked about it …'
(Sekposangcel 6:32)

b. ho-nAn yez-i-*ni*/*-*nikka* ku seng-i uysim-ha-nila. (Nung.emkyeng 2:3)
ho Top fox-ni/**nikka* that character-Nom suspicious-many-Dc
'Ho' means fox, of which its character is suspicious.

c. ku-ka kwukhoyuywon-ey tangsen-doy-*ni*/*-*nikka*kuttae-nai-ka selun nes-iye-ss-ta.
he-Nom congressman-toelect-become-ni/-*nikka* that-time age-Nom thirty four-be-Pst-Dc
'He was elected as a congressman, (and that time was) when he was 34 years old.'

In 5b, *-ni* connects the events in sequential order rendering no particular meaning. In 15th, and 16th century Korean data, this type of function can be easily found. On the other hand, in PDK, *-ni* with pure sequential meaning cannot be found. Instead, the function of *–ni* illustrated in 5c, which sets the domain to introduce further information, is found in both older and modern data. Although this case does not indicate temporal sequence, it does indicate sequence of speakers' cognition.

3.2. SYNTACTIC & SEMANTIC DIFFERENCE OF *-NI* AND *-NIKKA*.

In this section we will look at the conditions where *-ni* and *-nikka* are not interchangeable. There are cases where *–ni* and *–nikka* appear to be interchangeable. However, in such cases, their usages are semantically and pragmatically different.

When *-ni* is attached after morphemes that indicate tense and aspect, such as *-te-*(retrospective), *-li-*(conjecture), *-lye-*(conjecture), *-ke-*(supposition) *-sao-/-o-*(respect), *-ta-*(suspicion), *-na/no-*(reason), it cannot be replaced by *-nikka*. Another case where *–ni* cannot be replaced by *–nikka* is when it is followed by defective nouns like *–mankum,* and *-manchi* which indicate a 'degree.' The structures of tense/aspect morpheme + *-ni,* and *-ni* + defective noun have been semantically grammaticalized.

(6) a. ecey halwu cong.il huli-*teni* onul-un nalssi-ka malkta.
yesterday day all-day cloudy-Rtr today-Top weather-Nom clear Dc
'It was cloudy yesterday, but it is clear today.'

b. naynyen-imyen kyengki-ka coh-aci-*lyeni* hako kitay-tu-lul hako iss-ta.
next year-as for economy-Nom good-become-Rtr-ni Qt expectation-Acc do be-Dc
'Everybody expects that business will be better next year.'

c. onul-un chuwu-*nimankhum* pakk-ey naka-ci mal-ala.
today-Top cold-nimankum outside-to go out-not-Im.
'Since it is very cold today, you'd better not go out.'

Here, we propose that the reason why *–nikka* cannot be interchangeable with *–ni* is due to the interactive and interpersonal nature of *–kka*. In other words, the function of the structures above with *–ni* is to convey one's past experience (*-te-*), conjecture (*-li, -lye*), or supposition (*-ke-*), etc. in which the speaker doesn't seek collaboration of the interlocutor. Thus, it can be concluded that the morpheme *–kka* brings in the intersubjectivity and interactiveness in that it invites and seeks the colloboration, agreement, sympathy, etc. of the interlocutor. The nature of *–kka* will further be discussed in the sections below.

Conversely, there are also cases where *–nikka* cannot be replaced by *–ni.* The first case where only *-nikka* can be used is when it is followed by the topic marker *–(n)un* or the polite ender *–yo.*

(7) a. cip-e o-*nikka-nun* chinkwu-ka wa i-ss-ess-ta.
home-to come-*nikka*-nun friend-Nom come be-Pst-Dc.
'When I came home, and then (I found out that) my friend was already at my house.'

b. poki silh-*unikka-n* ellun ol-a ka-sey-yo.
see dislike-*nikka*-n quickly go back-Pol.
'Since I don't want to see you, please leave quickly.'

As seen above, *-nikka-nun* expresses a more emphatic meaning of *–nikka.* The topic marker *–nun,* however, cannot be attached to *–ni.* This might be due to the topic function of *–nikka.* S-O. Sohn (1993) notes that in discourse, the proposition of *–nikka* clauses constitute a discourse topic in that the proposition is known or knowable by the interlocutor. Thus the topic marker *-nun* follows *–nikka* forming the structure of '[clause–*nikka -nun*] [clause]' and manifests a strong topicality. (1993:94) S-O Sohn also notes that *-nikka* clauses, like

NP topics, constitute the framework which has been selected for what is going to be said (1993:90). Based on S-O. Sohn's study, it can be assumed that *–kka* has a function of nominalizing the preceding clause to give rise to the meaning of topicality.

Despite the fact that the polite ender *-yo* can be attached to both *–ni* and *–nikka* sentence enders, the semantic and pragmatic meaning is entirely different.

(8) a. na (ce) haksaeng i-la-*nikka(-yo)*!
I student be-Qt-*nikka*(-Pol)
'(I told you) I'm a student!'
b. naeka (ceka) haksaeng i-la-*ni(-yo)*?
I-Nom student be-Qt-ni(-Pol)
'(What do you mean that) I am a student? (I'm not a student.)'

When *–nikka(yo)* is used as sentence ender, it has the function of reasserting already mentioned information, whereas *–ni(yo)* as the sentence ender has the meaning of strong disagreement. The grammaticalized sentence ender of *–ni* and *–nikka* will be discussed in detail in the following section.

4.0. GRAMMATICALIZATION OF *-NI* AND *-NIKKA*

Only *–ni* can be found in written data from the 15th and 16th centuries, whereas *–nikka* or any prototypical form of it are absent. In S-O. Sohn (in press), she reports that the occurence of *nikka* which consists of *ni-* plus *–ska* appears in the late 19th century, when colloquial styles emerge widely in Korean literature. Hence, S-O. Sohn illustrates the historical development of *nikka* as below:

(9) *-n* (15th C.-18th C.) > *-ni-ska* (late 19th C.) > *-nikka* (20th C.)

From this, we can assume that *-kka* was adjoined later to the connective particle *-ni*, which subsequently became the causal particle *-nikka*. One theory could be that, since written and spoken styles of Korean had been different until the early 20th century, *-kka* was only used colloquially as an interactive marker throughout history. With frequency being one of the three conditions for grammaticalization, a semantic shift must then have occurred, in which *-nikka* today has a more interactive and subjective function. Yet another explanation for the grammaticalization process of *–ni* to *-nikka* is that *–kka* is a grammaticalized lexical form that has been frequently used with *–ni*.

In the more recent data (PDK), *-ni* has been replaced by *-nikka*, with the ambiguous dual-function of temporality and causality. S-O. Sohn (in press) points out that meaning of causality in *nikka* derives from its sequential meaning through conversational implicature. This phenonmenon of causal meaning developing out of sequentiality is observed cross-linguistically (Traugott and Dasher, 2002) In this vein, we further propose that the morpheme *–kka* in *-nikka* affects the semantic and pragmatic function, meaning, and emphasis of the two clauses adjoined by *-nikka*. That is, as discussed in several studies, where *-nikka* contains interactional, discoursal, and subjective functions (S-O. Sohn, 1993, 1996; Kim & Suh, 1993, 1994), we suggest that it is the morpheme *–kka* in *–nikka* that brings about the speaker's assertion, belief, justification, and subjectivity. Let us consider the two examples illustrated below:

(10) a. khi khu-n salam-i wa-ss-*uni*(**nikka*) ku-nun Hong Kil-dong i-ess-ta.
hight big-Rel person-Nom come Pst-ni(**nikka*) he-Nom Hong Kil-dong be-Pst-Dc
'The tall person has come, and his name was Hong Kil-dong.'
b. khi khu-n salam-i wa-ss-*uni* icey-n kekceng-i eps-ta.
hight big-Rel person-Nom come Pst-ni now-Top worry-Nom not exist-Dc
'Since the tall person has come, now we have no worries.'
c. ku khi khu-n salam-i wa-ss-*unikka* icey-n kekceng-i eps-ta.
hight big-Rel person-Nom come Pst-*nikka* now-Top worry-Nom not exist-Dc
'Since the tall person has come, (therefore) we have no worries.'

In 10a, connective *-ni* sets up the temporal domain as a general topic which is followed by more detailed and related information. In this case, *-nikka* may not be used, because *-kka*, which brings in the speaker's assertion, belief, and/or justification, etc. can be adjoined to the *–ni* clauses that denote the speaker's subjectivity, such as a proposal of a reason. Therefore, the second clause in 6a, which marks the name of the tall person who has arrived does not involve the speaker's subjectivity.

Examples 10b and 10c show that both *-ni* and *-nikka* are by and large interchangeable. However, there is a slight difference in pragmatic meaning, in which the sentence with *-kka* gives more emphasis to the preceding clause and further projects the speaker's justification of why it's safe to not worry since the tall person has shown up. However, 10b implies that there is no need for the speaker to justify his/her opinion because it may be a concept which is accepted by the interlocutor. Hence, the role of *-kka* in *-nikka* is to bring in and lay emphasis on the speaker's subjectivity, knowledge, justification, belief, and assertion in which the speaker seeks to elicit the interlocutor's agreement and co-alignment.

As described above, historically *–kka* has been derived from '*-ska*' where '*s*' phonetically intensified the following consonant. According to Suh (1990), the role of '*s*' is to invite the interlocutor's collaboration and agreement. Suh attempts to explain the internal structure of *–nikka* in the following manner: *–un* (nominalizer) + *i* (word ending) + *s* (marker to seek interlocutor's collaboration) + *–ka* (marker to separate and connect clauses). Although this concept is persuasive, the author fails to offer evidence and elaboration to corroborate the speculation. Nevertheless, the evidence from other studies, as well as that of this paper, seems to generally concur with his proposed theory.

In short, it can be assumed that *–kka* was originally a discourse marker which had the function of representing the speaker's subjectivity, knowledge, justification, belief, and assertion. That is, as the causal *–ni* and the full connective form of *–kka* have been used together frequently, the full connective form has grammaticalized into the morpheme *–kka,* which resulted in the connective *–nikka.*

5.0. SENTENCE FINAL *–NI* AND *-NIKKA*

In Korean, there are instances of grammaticalization in which subordinate clauses develop into sentence enders with a new function and/or meaning. For instance, H. Sohn (2001) discusses the grammaticalization processes involved in the development of two types of interactive sentence enders[1]: the compression type, in which grammaticalization occurred internally through semantic, pragmatic and structural compression (e.g. *–ci anh-ayo* > *-canh-ayo*), and the main clause omission type, in which grammaticalization took place in subordinate clause enders only after the main clauses were unrecoverably omitted (e.g. *pi ka o-nuntey-yo* 'It's raining. (What shall we do?)') (2001:283). H. Sohn speculates that the possible motivation for the development of interactive sentence enders is derived from the speaker's desire to maintain politeness by avoiding coerciveness or imposition toward their interlocutors in a face-threatening speech act. (2001:290) Thus, in this section, we will discuss the grammaticalization process of *-nikka* and *-ni* as the main clause omission type of interactive sentence enders.

5.1. PROCESS OF GRAMMATICALIZATION

S-O. Sohn (1996) observes the development of the clause subordinator *–nikka*[2] to the sentence final particle *–nikka,* which is used to express the speaker's reassertion or recapitulation of a prior statement. Thus, the process of grammaticalization for *-nikka* is as follows: temporal 'when' > causal 'since' > reassertion. (1996:220) That is, temporal *-nikka* shows an unexpected or accidental discovery as in:

(11) cip-ey ka-*nikka* pelsse pam yelhan si-yess-ta.
house-to go-*nikka* already night 11 o'clock be-Pst-Dc
'When I came back home, it was already 11:00 pm.'

Yet another dominant function of the clause *-nikka* denotes the causality which expresses the subjective and speaker-oriented attitude (1996:227). The following example is provided below:

(12) sikan-i eps-*unikka* taxi tha-ca.
time-Nom not exist-u*nikka* taki take-Rq
'Since we don't have time, let's take a taxi.'

Lastly, when *-nikka* is preceded by a morphological sentence ender, such as *–ta* (declarative), *-la* (imperative), *-ca* (propositive) and *–nya* (interrogative) the main clause may be omitted, which eventually grammaticalized into a sentential particle which behaves as an independent clause. The function of the grammaticalized *-nikka* here is to reassert the speaker's prior statement, command, proposal, or question, such as kan-ta-*nikka* 'I told you already that I will go'; ka-la-*nikka* 'I told you already to go', etc. In other words, the generalized semantic-pragmatic function of the omitted clause has been abstracted into a modal meaning which is imposed on the remaining subordinate enders.

One of the general mechanisms of grammaticalization is semantic-pragmatic inference (metaphoric/metonymic) that follows the principle of unidirectionality which moves from a less abstract concept to a more abstract concept (Traugott and Heine, 1991; Hopper and Traugott 1993). The metaphorical abstraction process is proposed by Traugott and Heine as PERSON > OBJECT > SPACE> TIME > PROCESS > QUALITY. Similarly, according to S-O Sohn (1996), grammaticalization of *-nikka* adheres to the metaphorical abstraction process, in that temporal 'since' (TIME) becomes causal and then to the function of reassertion (QUALITY). However, no historical evidence is provided to validate this claim.

5.2. MOTIVATION

On the topic of motivation in grammaticalization, HM. Sohn (2001) proposes that the cause for the main clause omission is the combination of the 'least effort principle' (the speaker's strategy to dilute illocutionary force) and the speaker's pragmatic politeness and avoidance strategies to maintain politeness. As a speaker's subjectivity and attitude intensifies and increases, with *-kka* in *-nikka*, S-O Sohn (1993) claims that *-nikka* is not apt in situations where politeness is called for. This may be accounted for by the omission of the main clause in interactive sentence ender, *-ta/ -la/ -ca/ -nya -nikka* as in:

(13) kan-tako hae.ss-*unikka* cakkwu mwul.e pocima
go-Qt say-Pst-*nikka* repeatedly ask-not-Im.
I have said that I will go, so stop asking me repeatedly.
> kan-ta-*nikka* cakkwu mwul.e pocima
I told you already that I will go, so stop asking me repeatedly.
> kan-ta-*nikka.*
I told you already that I will go. (So, stop asking me repeatedly)

In other words, as can be seen in the examples above, *-ta-nikka* has been grammaticalized from the indirect quotative structure, *-tako hata.* The morphemes *–ta, -la, -ca,* and *–nya* with the connective particle *–ko hata* indicate what the speaker has said or heard before. Furthermore, because *-ta-nikka* above reiterates what the speaker has already said, it expresses a strength in the speaker's attitude seeking the interlocutor's co-alignment with the speaker's initiation. Due to the strong nature of this negative attitude, the main clause that follows is typically one which is inappropriate for politeness. Hence, the main clause becomes omitted in order to maintain politeness by avoiding coercion toward the interlocutors in a face-threatening speech act.

As mentioned above, *-ni* has also been grammaticalized into an interactive ender. It can be speculated that this sentence ender is derived from the domain setting subordinate connective *-ni* which is not interchangeable with *–nikka.* Moreover, contrary to interactive enders *–nikka* and *–(ta)nikka,* which seek the interlocutor's corroboration and co-alignment, the semantic and pragmatic function of the interactive ender *-ni* voices the speaker's disagreement with the interlocutor's assumption. Observe the example below:

(14) Cey-ka haksaeng-i-la-ko ha-*ni* ku ket-un sasil-i anipnita.
I-Nom student-be-Qt say-*ni* that thing-Top true-be not be-Def-Dc
'You say that I am a student, that is not the truth.'
>Cey-ka haksaeng-i-la-*ni* ku ket-un sasil-i anipnita.
What do you mean/You say that I'm a student, that is not the truth.
>Cey-ka haksaeng-i-la-*ni*?
What do you mean I'm a student? (that is not the case: I am not a student.)

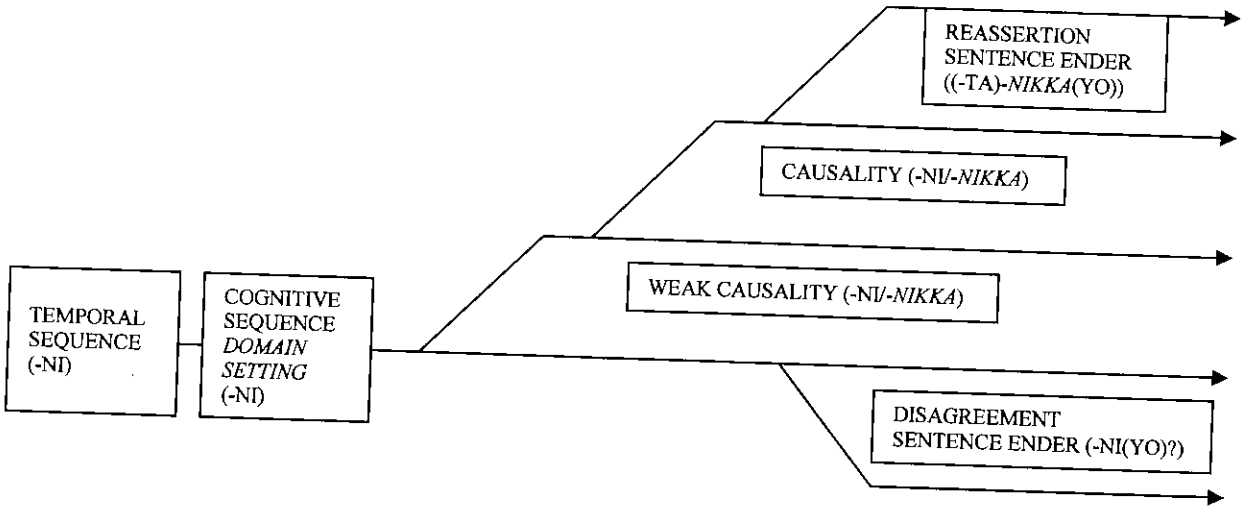
This process of sentence ender *-ni* is similar to those of sentence ender *-(ta)nikka* in that the main clause has been omitted, which has also been motivated by the speaker's strategy for maintaining politeness.

In examining the semantic difference between interactive enders *–nikka* and *–ni,* it can be noted that *-kka* has affected the meaning and pragmatic function of *ni.* That is, interactive ender *–nikka* (and connective *–nikka*) are characterized as providing grounds for inviting the interlocutor's collaboration, co-alignment, and agreement (Kim & Suh 1994). On the other hand, the sentence ender *–ni* may be characterized as providing grounds for strongly projecting the speaker's disagreement with, or disapproval of the interlocutor's assumption. In view of that, the evidence above further suggests that the *-kka* in *-nikka* not only lays emphasis on the speaker's subjectivity, knowledge, justification, belief, and assertion but may also have the function of seeking the 'agreement' of the interlocutor for the purpose of justifying his / her standing. In other words, a possible explanation for why *kka* cannot be adjoined to the sentence ender *-ni,* is because the speaker's objective is not to receive collaboration, but rather to set a domain to further inform and strongly project one's belief and opinion to object to the interlocutor's misassumption.

6.0. CONCLUSION

In this paper, we first examined the differences between connective particle *–ni* and *–nikka.* The two general semantic and pragmatic functions of *-ni* and *-nikka* are to mark temporal sequence and causality. Moreover, in PDK, the causal meaning of *–nikka* prevails and it continues to grammaticalize, while the dominant use of *–ni* is limited to usages with tense and aspect markers or defective nouns. In addition, *-ni* can be found in a more traditional and formal speech / text style. The overall grammaticalization process can be summarized in Figure 1.

FIGURE 1



Looking at the characteristics and origin of *–kka,* we propose that the roles of *–kka* in *–nikka* are to represent the speaker's subjectivity, knowledge, justification, belief, and assertion; and to invite the co-alignment of the interlocutor. Furthermore, we speculate that *–kka* originated from a discourse marker which carried such functions. That is, as the causal *–ni* and the marker that grammaticalized into the morpheme *–kka,* have been used so frequently that the two forms eventually joined to become the connective *–nikka.*

As for the grammaticalization of *-nikka* and *–ni* interactive sentence enders, the following process is suggested. As S-O. Sohn (1996) has suggested, the general process of *–nikka* is: temporal sequence (connective) > causal (connective) > reassertion (sentence final). The sentence ender *–nikka* is used to express the speaker's reassertion or recapitulation of a prior statement, and indirectly solicit the collaboration of the interlocutor. On the other hand, the grammaticalization process of the interactive ender *–ni* derives from the connective *–ni* that set the domain for further explanation. Thus it can be described as below: cognitive sequence (domain setting connective) > disagreement (sentence final).

Finally, the primary motivation of grammaticalization for the two sentence enders comes from the speaker's desire to maintain politeness to the interlocutor. That is, since the sentence ender *–nikka* exhibits a strong subjectivity and the sentence ender *–ni* expresses a strong negative attitude, the main clause that follows is typically one which is inappropriate for politeness. Hence, the main clause becomes omitted in order to maintain politeness by avoiding coercion toward the interlocutors in face-threatening speech acts.

In conclusion, although we have provided more insight to the grammaticalization of *–ni* and *–nikka*, further research is required to determine the precise function and development of the morpheme *–kka*.

NOTES

1. H. Sohn uses 'interactive' in the sense that the enders are used colloquially only in interactive conversational situations.
2. In addition to *nikka,* S-O. Sohn also discusses grammaticalization of two sentence finals: quotative particle *–ko* and clause subordinator *–myense* 'while'.

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ON THE TWO CLASSES OF POSSESSIVES IN POLYNESIAN[1]

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ABSTRACT

There are two classes of possessives in most Polynesian languages. The choice of a possessive marker (in general, *a* or *o*) appears to depend on the type of relationship the modifier expresses in relation to the head noun or the noun class to which the head noun belongs. *A* is often classified as an alienable possession element, and *o* as an inalienable possession marker. In Hawaiian, for example, body parts, among other things, are inalienable and are marked by *o*, while alienable objects, such as books, are marked by *a*. However, such distinctions are not always clear cut. Often words which normally belong to the *o* class can also be marked by the marker *a* in order to express a slight difference in meaning. For example, *house* is basically an *o* class word, but when *house* is treated as an object rather than a living space, as in "my house that I built", it is marked by *a*.

In this paper, I will show similarities between the *o/a* distinction and the gender distinction commonly found in European languages. Although such analyses were previously rejected on the basis of the arbitrary nature of gender assignment, more recent studies on languages with a gender system have revealed that gender assignment is not as arbitrary as once assumed (cf. Köpcke and Zubin 1983, 1984). I will argue that there are two gender classes in Polynesian with regard to possession. Some nouns can belong to either class depending on the different shades of meaning intended.

1.0. INTRODUCTION

There are two classes of possessives in most Polynesian languages.[2] In general, one class is marked by the possessive marker *a*, and the other class by *o*. The choice of possessive marker seems to depend on the type of relationship the modifier expresses in relation to the head noun or the noun class to which the head noun belongs. *A* is often classified as an alienable, or controllable possession element, and *o* as an inalienable, or not-controllable possession marker. In Hawaiian, for example, body parts, among other things, are inalienable and are marked by *o*, while alienable objects, such as books, are marked by *a*:

Ko'u	po'o	Ka'u	puke
the+*o*+my (*o* class)	head	the+*a*+my (*a* class)	book
'My head'		'My book'	

However, such distinctions are not always clear cut. Often words which normally belong to the *o* class can also be marked by the marker *a* to express a slight difference in meaning:

Ko'u	hale	Ka'u	hale
the+*o*+my (*o* class)	house	the+*a*+my (*a* class)	house
'My house [I live in]'		'My house [that I built]'	

First I will give an overview of previous analyses. It has been argued that the Polynesian *o/a* distinction is not like the gender system found in European languages because in these languages gender is assigned to nouns arbitrarily while the *o/a* distinction is not arbitrary. The recent studies (cf. Köpcke and Zubin 1983, 1984), however, revealed that the gender assignment is not completely arbitrary but is structured and motivated, and there are many cues which speakers use to determine to which gender a noun should be assigned. In this paper, I will show similarities between the *o/a* distinction and the gender distinction commonly found in European languages despite earlier rejections of such analyses. I will also argue that when a noun can be marked either by *o* or *a*, the choice of the possessive marker depends on the different shades of meaning of the noun in question. The notion of radial category plays a significant role in such cases. I will also argue that in Polynesian the *o* class is the marked class and that it is only *o* class words that show the *o/a* alternation. Furthermore, some Polynesian languages have lost the *o/a* distinction all together. In my analysis, since the *o* class is the marked class, if a language merges this distinction, it is predicted that the *o* class will be lost in the merger.

2.0. PREVIOUS ANALYSES

According to Elbert (1965), Williams and Williams' *First lessons in the Maori language* (1862:16) may have been the first source to mention the *o/a* distinction in Polynesian. They characterized this distinction as active (*a*) and passive (*o*) possession. Biggs (1961:21) analyzes the distinction in Māori as dominant (*a*) versus subordinate (*o*). Elbert (1965:20-21) calls the *a* class a nuance of subjective ephemerality, and the *o* class permanent unchangeability. All of these can be related to alienability or inalienability, or to controllability of a noun. According to Chappell and McGregor (1989:25), alienability encodes 'temporary ownership, voluntary association, all kinds of transitory possession and the use and disposal of objects.' In addition, body part to whole relations and/or kinship terms are encoded as inalienable in most languages, if not all, which have a distinct inalienable construction (Chappell and McGregor 1989:26).

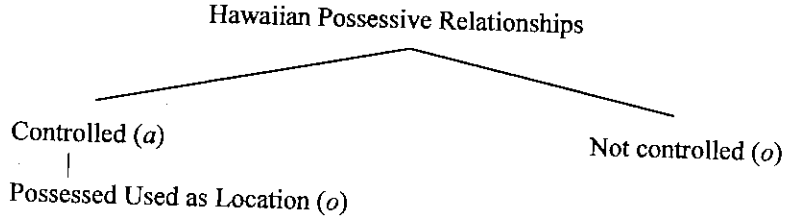
2.1. WILSON'S ANALYSIS

Wilson's analysis (1976) is probably the most extensive study of the *o/a* distinction to date. His main focus is on the Hawaiian language. He argues that there are three existing hypotheses for the *o/a* contrast discussed in grammatical studies of Polynesian languages, namely, (1) the arbitrary noun class hypothesis, (2) the feature-based noun class hypothesis, and (3) the relation-based hypothesis. He concludes that the relation-based hypothesis with some additional rules predicts which possessive form is to be used with a noun in question.

Wilson argues that the arbitrary noun class hypothesis claims that nouns are arbitrarily grouped into two different classes. He equates this arbitrary classification with the gender system found in European languages. The presupposition is that for each noun, speakers must memorize to which category it should belong.

Under the feature-based classification, nouns are classified according to their inherent semantic features. He concludes that the semantic features of nouns alone cannot be sufficient to determine to which class a noun may belong since some nouns can be marked both by *o* and *a*.
The relation-based hypothesis claims that there are no noun classes. The choice between the two possessive particles is solely based on the relationship between the possessor and the possessed.
In their descriptions of Fijian, a Melanesian language, Schütz and Nawadra (1972:99) claim that the choice between two forms of possessive markers is based on the relationship between the possessor and the possessed. Wilson basically adopts their analysis, but there are some exceptions in Hawaiian which cannot be explained by the rules established by Schütz and Nawadra. In order to account for the Hawaiian data, Wilson had to create the following additional rules.

(1) Relationships which involve the use of the possessed by the possessor as a location require *o* marking.
(2) Relationships controlled by the possessor in which the possessed does not serve as the location of the possessor require *a* marking.
(3) Relationships which are not controlled by the possessor require *o* marking. (Wilson 1976:43)



Since possession involving some controlled relationships is marked by *o*, the marker of a non-controllable relationship, Wilson has to create a subgroup within the controlled relationship to account for such exceptional markings.

3.0. GENDER HYPOTHESIS

According to Elbert (1976:21), Milner (date unknown, p. 64) describes the Fijian counterpart of the *o/a* distinction as a gender system in his *Fijian Grammar* (Suva, Fiji). However, this gender hypothesis is rejected by most scholars. Elbert (1965:21-22) and Krupa (1982:113), for example, reject this hypothesis on the grounds that in Polynesian there are many words which can be assigned to either class depending on context, and this is not a trait of gender systems. Their assumption is that each noun belongs to only one class in a gender system.

Another common assumption made about the gender systems of European languages is that they employ arbitrary noun classification. Nouns are arbitrarily assigned to two or three possible classes. Wilson (1976) rejects the gender hypothesis on the grounds that nouns are not arbitrarily classified into two categories in Polynesian. He claims that there are many newly introduced words in Polynesian after European contact, and there is uniformity to which class a noun should belong among various Eastern Polynesian languages.

3.1. IS THE GENDER SYSTEM REALLY ARBITRARY?

Wilson's assumption that nouns are arbitrarily assigned to a specific class in the languages with a gender system is not a correct generalization. Recent studies on languages with a gender system have revealed that the gender assignment is not completely arbitrary as once assumed by some scholars. For example Köpcke and Zubin (1983, 1984) discovered 38 important cues based on phonology, morphology, and semantics for predicting gender (MacWhinney et. al. 1989:258-261). For example, there are five semantic cues: Natural males are masculine; natural females are feminine; young beings, superordinate nouns, and numerals are neuter. Morphological endings like *–lein, -ment, -ett, -chen, -en,* and *-um* signify neuter. Using these cues, Köpcke (1982) was able to assign 90% of 1466 monosyllabic words the correct gender. Therefore, the gender system is not as arbitrary as Wilson claims. There are many cues, though they may be not clear-cut, as to what class a noun should be assigned.

The gender system found in European languages utilizes sex difference as the basic tool to classify nouns into two or three classes.[3] This creates problems for the items which do not have sex organs, but all nouns, regardless of the presence of genitalia, must be grouped in one of the available classes. Similarly in Polynesian cases, there exist two classes, *o* class and *a* class, commonly known as inalienable and alienable. It is not always clear what should be considered inalienable as in gender assignment, but nouns are somehow categorized into two classes in Polynesian languages. In the case of Polynesian, the *o* class is the marked class. There are many cues for determining if a noun should belong to this class. For example, in Hawaiian, some kinship terms, body parts, clothing articles, and spatial relationships are associated with inalienability or the *o* class.

However, there are discrepancies among languages as to what should be included in one class. In German the 'moon' is masculine *der Mond*, but in Romance languages it is feminine, e.g., *la luna* (Italian, Spanish), *la lune* (French). Similarly, 'father' and 'mother' are inalienable in *Hawaiian (ko'u makua kāne* 'my father', *ko'u makuahine* 'my mother') and Samoan (*lo'u tamā* 'my father', *lo'u tinā* 'my mother'), but they are alienable in Tongan (*'eku tamai* 'my father', *'eku fa 'ē* ' my mother' [*'eku* is an *a* class possessive marker]). In both gender and Polynesian possession systems, there are general rules as to what noun should belong to what class, but details may differ in individual languages. As mentioned earlier, Wilson (1976:40) rejects the arbitrary noun class hypothesis, claiming that newly introduced items are assigned to two classes uniformly in different languages. However, 'car', for instance, is an *o* class word in Hawaiian (*ko'u ka'a* 'my car') while it is an *a* class word in Samoan (*la'u ta'avale* 'my car'). In Polynesian, spatial dimension is an important factor in the *o* class. If you wear something or if you are inside something, those objects are often considered as the *o* class. A 'house' is an *o* class word in most Polynesian languages. A 'car' can be viewed as something that you enter, like a house, that you drive, or as a regular noun that you possess, like a book. In Hawaiian, the spatial dimension is considered to be important in classifying this noun, whereas Samoan does not value this feature for this particular noun[4]. Therefore, like gender systems, nouns signifying the same object may belong to different classes in different languages.

The other reason why similarities between the gender system and the Polynesian *o/a* distinction are typically rejected is that in the *o/a* distinction class membership may vary with context. Even in the gender

system, identical nouns may be marked as male or female depending on context. *Un journaliste* (male journalist) and *une journaliste* (female journalist), *un russe* (male Russian) and *une russe* (female Russian) in French are such examples. In Polynesian, it seems that such variation is only possible with the nouns in the *o* class. The *o* class nouns can be marked by *a* to express a different nuance in meaning, but not vice versa:

ko'u hale	my house (I live in)	ka'u hale	my house (that I built)
*ko'u keiki		ka'u keiki	my child

In summary, gender assignment is not completely arbitrary, but actually is quite systematic following complicated rules. Assignment of nouns into two categories in Polynesian is also similar to the gender system because it is governed by rather complicated rules ulitizing features associated with inalienability. Both the gender and Polynesian systems have a prototypical core in their noun categories. An entity with male genitalia would mostly likely to be in the category masculine.[5] A 'man' would be a good member of this category. In the case of Polynesian, body parts, like 'head', would be a good example of the category inalienable. Both systems have their own ways to deal with less prototypical examples. In addition to this, class membership may vary according to context in both systems. An entity may be male or female. When sex is not in focus, the masculine form tends to be the generic norm in European languages. When one wishes to express the difference in sex, the feminine form is used. Similarly, the prototypical 'head' is the one which is attached to one's body, thus it is inalienable. But when it is detached from its body, or when someone is talking about the 'head' of a doll, it is categorized as alienable. The 'head' in this sense is less prototypical. Thus even though the identical word 'head' is used, what it refers to is not the same, so the different senses of the word 'head' can belong to different groups. Let us look at this variation more closely in the following section.

3.2. *O/A* VARIATION

It is well noted that in Hawaiian minimal pairs like the following exist:

ko'u ki'i	the picture of me	ka'u ki'i	my picture (that I own)
ko'u hale	my house (I live in)	ka'u hale	my house (that I built)
ko'u ake	my own liver	ka'u ake	my liver (food)
ko'u makua	my parent	ka'u makua	my adult (my student)
ko'u inoa	my name	ka'u inoa	my name which I bestow on someone
ko'u mele	my song (about me)	ka'u mele	my song (I composed)
ko'u lole	my clothes (to wear)	ka'u lole	my clothes (to sell)
ko'u pua	my flowers (for the ear)	ka'u pua	my flower (to put in a vase)

However, in general, the *a* class nouns cannot be marked with *o*. Following are some examples.

ka'u wahine	my wife
ka'u haumāna	my student
ka'u malihini	my stranger (guest)
ka'u keiki	my child
ka'u mo'opuna	my grandchild

Māori also makes a similar distinction:

te waiata o te tangata ra that man's song (about him or concerns him)	te waiata a te tangata ra that man's song (he composed or sang)

Jack Ward[6] (personal comm.) told me that such minimal pairs are common in Tahitian as well. All of these languages belong to the East Polynesian branch.

3.2.1. SAMOAN

I interviewed a native speaker of Samoan[7], which belongs to the Samoic branch of Polynesian, to see if the minimal pairs illustrated above exist in Samoan as well. First of all, I asked him "How do you say, 'This is my picture?'" He answered, "*'O lo'u ata.*" (predicate marker / my *o*-class / photo). The word *ata* belongs to the *o* class. Then I continued "Can you say *'o la'u ata?*" His first answer was no. Subsequently, I asked him if

the phrase *'o la'u ata* means anything. His answer was still no. I then showed Hawaiian examples and asked him if such distinctions exist in Samoan. Then he told me that *'o la'u ata* is also possible if you want to say 'that is a picture [that I took].'

I continued my questions and asked him about the use of possessives with the word *fale* 'house'. *'O lo'u fale* is the unmarked choice for 'my house'. However, it is also possible to say *la'u fale*. He provided the following scenario for the use of *la'u fale*. "Suppose everyone has to build a (toy) house for a class project. If you want to say 'This is my house (that I built),' then you can say, *'O la'u fale lea*.'"

The head belongs to the *o* class, but if there is a doll of yourself, the head will be referred to as *'o la'u ulu lea* 'This is my head,' with *a*. Similarly, clothing items are *o* class, but if you designed a shirt and want to identify the one that you designed, you say *la'u 'ofu*. According to my informant, 'father' is almost always referred to as *lo'u tamā* even if you are pointing at the picture of him. He was not able to come up with a context in which he might be able to say *la'u tamā*.

My informant told me that some words cannot be marked with *lo'u* 'my' under any circumstances. 'Car', for example, cannot be used with *o*; it is always *la'u ta'avale*. Thus, the *o* class is a closed and marked class. Only *o* class nouns can be marked with *lo'u*, and *a* class nouns cannot be marked with *lo'u* in order to show some difference in meaning.

3.3. RADIAL CATEGORY

When I initially asked my Samoan informant if he could say *la'u ata* 'my photograph', he told me that the phrase is ill-formed, but after I showed him similar examples from Hawaiian he was able to think of a context in which he could use this phrase. Two meanings of 'photograph' are involved: the image depicted on the paper, and the paper itself. The former is *o* class and the latter is *a* class. The identical lexical word is used but the meaning is not exactly the same. For the 'head' example, my informant told me that if you use *la'u*, then head is treated as an object, and does not refer to the part of your body. When you talk about 'your house', the first thing which comes to mind is the place you live. The use of *la'u* alters the meaning to the house as an object, not the living space. When I started asking him questions, my informant was not able to imagine a situation in which he could use *la'u ata* (my-*a* class photo) because the primary meaning that he imagined was the image interpretation. For many nouns which belong to the *o* class, the interpretation for which you use the *o* marker is the basic prototypical meaning. Therefore, for lexical items in the *o* class such as *ata* 'picture', *fale* 'house', *ulu* 'head', and *'ofu* 'clothes', 'the image depicted', 'living space', 'head on your body', and 'a shirt that you wear' constitute the basic semantic core. The other uses of these words, such as 'picture that I own', 'the structure which I built', 'detached head', 'clothing items that you make', are noncentral semantic extensions. The basic meanings of the *o* class words do show some prototype effects. For example, at first my informant was not able to come up with a context in which the *a* interpretation is used.

3.4. THE DIRECTION OF CHANGE

Similar to the Dyirbal classifier system, which has four distinct categories (one of which being a catch-all category as discussed in Lakoff (1987:102-104)), there are two distinct, mutually exclusive categories in many Polynesian languages: the *o* class and the *a* class. Furthermore, in Polynesian the *a* class appears to include everything which is not specified for the *o* class.

Niuean no longer has the *o/a* distinction illustrated here.

lima haaku
arm my
'my arm'

tau tohi haaku
books my
'my books'

In other Polynesian languages, 'my arm' belongs to the *o* class (inalienable), and 'my books' to the *a* class (alienable), but as in the examples above, there is no distinction in the choice of possessive form between 'arm' and 'books'.

The Niuean possessive pronouns seem to reflect the *a* class found in other Polynesian languages. The following is a table of Niuean possessive pronouns (Kaulima & Beaumont 1994:27):

	singular	dual	plural
1st exclusive	hāku, haaku, hoku	ha maua	ha mautolu
1st inclusive		ha taua	ha tautolu
2nd person	haau	ha mua	ha mutolu
3rd person	haana	ha laua	ha lautolu

However, it seems that a remnant of such a distinction may be present in the first person singular possessive pronoun, hāku, haaku, hoku. I was not able to discover the details of the differences among these forms. If the form *hoku* indeed reflects the *o* class possessive morpheme found in other Polynesian languages, then it is most likely that Niuean used to make the *o/a* distinction but later lost it. The two noun classes were collapsed to one. The unified system reflects the earlier *a* class.

Between the two classes, the direction of change seems to be unidirectional, i.e., the extension of *a* class to *o* class. The above scenario for changes that took place in the Niuean possessive marking matches this hypothesis. There are some examples from different Polynesian languages which seem to support this hypothesis.

Jackson and Jackson (1999:28) reported the following tendency in modern Tuvaluan:

> In modern Tuvaluan, the A class appears to be taking over in the 3rd person—singular object and 3rd person—plural objects.

The change is partial, but it is interesting to note that the change is not in the other direction, from *a* to *o*.

Another interesting observation was made by Elbert (1965:23) when he was working with Rennellese informants:

> My introduction to Rennellese was at the Lake in East Rennell. Here the possessive system as described above was fully functioning. Persons were just as punctilious about the use of *a* and *o* as they were about using the proper person or number, or about making the inclusive/exclusive distinction. A speaker switched easily from *a* to *o*, as: *tena kaui... tona uguugu ma tena hanau ma tona guani* "his fish (*a*)... his wife (*o*) and his children (*a*) and his servant (*o*)".
>
> Later I went to Central Rennell, and was shocked one afternoon to hear Paul Takiika, a meticulous speaker, say *toku inana* (*o*, "my mother") and *tena tinana* (*a*, "his mother") in a single story. When questioned, Paul said that he would say *tona tamana* (*o*, "his father") in loud or formal speech (*gea to'a*) and *tena tamana* (*a*, "his father") in soft speech (*mi'igea*).
>
> The direction of change in some Rennellese dialects is also from *o* to *a*.

When I was working with a native Hawaiian informant from Ni'ihau, she also told me that people on Ni'ihau tend to use *a* more, whereas *o* is the norm in other Hawaiian dialects. The direction of change in possessive construction (if there is a change) is from *o* to *a*, but not the other way around. There is a general tendency for a marked category to be swallowed up by the unmarked category. Being a catch-all category, the *a* class is the unmarked category of the two. Thus the direction of change is from *o* to *a*.

4.0. CONCLUSION

I have attempted to show similarities between the *o/a* distinction in Polynesian and the gender system. Gender assignment appears not to be as arbitrary as previously described. Like the gender system, there are some inconsistencies in *o/a* class assignment among different Polynesian languages. If there are no noun classes, and an *o/a* choice is made solely on the basis of the relationship which involves the use of the possessed by the possessor, then we cannot correctly predict that my car is *ko'u ka'a* in Hawaiian but *la'u ta'avale* in Samoan. Roddy's (2001) study shows that inconsistency in the choice of *o* and *a* for expressing 'his car' among second-year Hawaiian language students. Six out of fourteen students wrongly chose *kana ka'a*, despite the fact that the expression is very common in beginning Hawaiian classes. When nouns in the *o* class can be expressed by *a* possession, the meaning (nuance) of the noun in question changes. The primary meaning is the one which is used with *o* possession, and this meaning seems to show some prototype effects. If there is change in the use of *o/a* distinction, the direction of change in possessive construction is from *o* to *a*.

NOTES

1. I would like to thank Benjamin Bergen, Yahna Kawaa, Terry Klafehn, and Linda Lanz for their valuable comments on the earlier drafts.

2. According to Wilson (1976), Niue and some Outlier languages have lost this distinction. Krupa (1982) lists Mae as an example of Outlier languages without this distinction.

3. Some seemingly male or female beings may be classified as neuter in some languages. For example, in German, young beings are classified as neuter. Therefore the following nouns are neuter: *Das Kind* 'child', *Das Fräulein* 'young woman', *Das Mächen* 'girl'. *Das Fräulein* 'young woman', and *Das Mächen* 'girl' also end with the morphological endings *–lein* and *–chen* respectively which signify the neuter.

4. A native Samoan instructor made the following comment when a student made a mistake saying *lo'u ta'avale* in his Samoan class. 'You may be thinking that you can be inside of the car, but no matter where you are in relation to the car, "my car" is always *la'u ta'avale* and never *lo'u ta'avale*. If you say *lo'u ta'avale* it sounds quite funny.'

5. There are some exceptions to this. In German, for example, young beings are categorized as neuter; thus the natural sex of the noun in question is suppressed in such cases.

6. Prof. Ward teaches Hawaiian, Marquesan, and Tahitian at the University of Hawai'i at Mānoa.

7. I would like to express my gratitude to Fa'afetai Lesā, a Samoan instructor at the University of Hawai'i at Mānoa.

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SEQUENTIAL VOICING IN MODERN JAPANESE:THE CASE OF NATIVE JAPANESE PREFIXES

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1.0. INTRODUCTION

The Japanese language shows several morphophonemic voicing phenomena in compounds and in prefix-base compounds. In particular, there have been substantial studies about sequential voicing, which is a translation of the Japanese technical term *rendaku*. Sequential voicing is the voicing phenomena in the word-initial consonant of the second element in a compound. Martin (1952) defines sequential voicing as the "replacement of a voiceless consonant with the corresponding voiced consonant." Following this statement, Vance (1987) also gives his definition, saying that sequential voicing "refers to the replacement of a morpheme-initial voiceless obstruent with a voiced obstruent." However, these studies do not consider the semantic environments in which sequential voicing occurs, but simply explain voicing as a substitution of a voiced obstruent for a voiceless obstruent. Further, as McCawley (1968) articulates in his paper: "I am unable to state the environment in which the 'voicing rule' applies. The relevant data are completely bewildering."; there is a basic agreement among researchers that the occurrences of sequential voicing is unpredictable and fundamentally irregular.[1] Even though there is a famous *rendaku* hypothesis called Lyman's Law, which was posited by Lyman (1894) and used as a fundamental theory, still there are counterexamples to his theory in modern Japanese. This suggests that there is a need for further investigation and that it is essential to consider not only the phonological environment but also the semantic environment within the compounds that exhibit sequential voicing.

In this paper, the focus is on native Japanese prefixes in order to reveal the nature of the semantic environment within prefix-base compounds. Native Japanese prefixes can construct compounds both with and without sequential voicing, and *rendaku* in these compounds is apparently unpredictable and fundamentally irregular. However, careful analysis of the data from a systematic dictionary search and consideration of the semantic environment involved in prefix-base compounds can reveal another aspect of sequential voicing.

2.0. PREFIX-BASE COMPOUNDS AND SEQUENTIAL VOICING

2.1. PREFIX-BASE COMPOUNDS IN JAPANESE

Prefix-base compounds in Japanese can be categorized into four groups, specifically: (1) native Japanese prefixes + native Japanese morphemes or words; (2) Sino-Japanese prefixes + Sino-Japanese morphemes or words; (3) native Japanese prefixes + Sino-Japanese morphemes or words; and (4) Sino-Japanese prefixes + native Japanese morphemes or words. Based on the notion that the occurrence of sequential voicing is largely restricted to the compounds consisting of native Japanese morphemes and words (Martin 1952; Nakagawa 1966; Otsu 1980), we will concentrate on the first group in this investigation.[2] In addition, all of the second morphemes in the prefix-base compounds in this paper will be restricted to nouns, since most prefixes are extremely productive regarding verb compounds, and would yield too much data to handle.[3] Thus, the central matter in this paper will be the compounds consisting of native Japanese prefixes and native Japanese nouns.

2.2. NATIVE JAPANESE PREFIXES AND SEQUENTIAL VOICING

Within the realm of native Japanese prefixes, we can find several types; numeral prefixes (*hito, futa,* and *mi*), honorific or beautification prefixes (*o* and *ma*), adjectival prefixes (*oo, ko,* and *o*), and prefix-like elements (*saki, mae,* and *ato*).

Nakagawa's (1966) study provides us with some clues regarding the phonetic environments in which sequential voicing occurs with these prefixes. According to his study, numeral prefixes disfavor sequential voicing. The typical examples given by Nakagawa are *hito+koe* (one cry), *futa+koto* (two words), and *mi+toori* (three ways). He states that there are exceptions after */futa/*, giving *futa+go* (twins) as an example. His overall examination seems to be acceptable, but it is lacking any investigation of semantic environments and any explanation why numeral prefixes inhibit sequential voicing. This needs to be adequately investigated.

Furthermore, according to Vance (1987), sequential voicing apparently never occurs after the honorific or beautification prefixes. One typical example is *o+hanasi* (a story). Although */hanasi/* usually undergoes sequential voicing in compounds[4], in the case of the honorific prefixes, there is no sequential voicing. However, unlike honorific or beautification prefixes, adjectival prefixes trigger sequential voicing. For instance, in *oo+doori* (big street), sequential voicing occurs whereas in *o+toori* (a street), there is no sequential voicing. Again, the question comes to the semantic environment in these compounds, because both prefixes in these cases end in /o/ and it seems that there is no difference in phonological environment. Further, other prefix-like elements such as */saki/*, */mae/*, and */ato/* also seem to trigger sequential voicing.[5] Since these prefixes carry a meaning which modifies the second element, these phenomena apparently have something to do with the semantic meaning of the preceeding prefixes.

3.0. THE PRESENT STUDY

3.1. RESEARCH QUESTIONS

In this paper, I will try to answer the following questions:

A. Do numeral prefixes disfavor sequential voicing? If so, what are the semantic environments involved? How can counterexamples be accounted for?
B. Why do honorific or beautification prefixes not trigger sequential voicing? What is the semantic difference between honorific prefixes and other adjectival prefixes, or other prefix-like elements which trigger sequential voicing?

3.2. DICTIONARY SEARCH

In order to answer the research questions above, a systematic dictionary search for relevant items was conducted using *Shincho Kokugo Jiten* (Shincho Japanese Dictionary [hereafter SKJ] 1995). As mentioned earlier, the search targeted words consisting of a native Japanese prefix + a native Japanese noun that appear as headwords in SKJ.

The first step was to go through all of the headwords that contain these prefixes. Then, the compounds that have Old Japanese words as the second element were excluded as Vance (2002) suggests that there are considerable differences between Old Japanese and modern Japanese regarding sequential voicing.[6] After that, the compounds that inhibit sequential voicing according to Lyman's Law —— in other words, the compounds with a voiced obstruent in the second element —— were left out. The results of this dictionary search are demonstrated in the tables below. In the case of the tables for the compounds that inhibit sequential voicing, the examples with voicing are displayed as well.

3.3. EXPERIMENT

Based on the results from the dictionary search, an experiment with native speakers of Japanese was also conducted to validate the data. There were four participants, and they were asked to judge all of the compounds listed in the tables. The participants' stay in the United States was shorter than three years, and all of the participants were originally from the Tokyo area. The intention to exclude native speakers from other areas was to decrease the possible influence on the data from dialects that have different phonological rules.

4.0. DISCUSSION

4.1. NATIVE JAPANESE NUMERAL PREFIXES

In order to answer the question A, all of the headwords consisting of native Japanese numeral prefixes (*hito*, *futa*, and *mi*) and native Japanese nouns were collected and displayed in the tables below.

4.1.1. THE NUMERAL PREFIX, /HITO/ (ONE)

I found 24 headwords from SKJ which begin with the numeral prefix */hito/* (one-). As Table 1 clearly shows, in all cases, sequential voicing does not occur. The answers from the native speakers who participated in the experiment confirm this. Even with the nouns which normally exhibit sequential voicing with other elements according to Lyman's Law — morphemes or words with a voiceless obstruent in the initial position,

which do not contain voiced obstruents — */hito/* does not trigger sequential voicing. For instance, in example 8, *hito+kuti* (one bite, one mouth), sequential voicing does not occur even though in the case of *oo+guti* (a big mouth), it does. Similarly, example 19, *hito+hata* (one flag), does not exhibit sequential voicing whereas *te+bata* (a handheld flag) exhibits it. These phenomena can lead us to make an induction that the difference between */hito/* and other elements that trigger sequential voicing lies in their semantic function. In *hito+kuti* and *hito+hata*, */hito/* simply numerates the number of *kuti* (a bite, a mouth) and *hata* (a flag), and attaches the meaning of 'one' to them. Thus, there is no change in the properties of the second elements. On the other hand, in the case of *oo+guti*, the adjectival prefix */oo/* (big) describes the size of *kuti* (a mouth). Likewise, *te* (a hand) describes the configuration and usage of *hata* (a flag). Therefore, it can be said that in these compounds, the first element modifies the second element, whereas */hito/* does not. By looking at the case of other native Japanese numeral prefixes, */futa/* (two) and */mi/* (three) in Tables 2 and 3, this hypothesis can be confirmed.

4.1.2. THE NUMERAL PREFIXES, /FUTA/ (TWO) AND /MI/ (THREE)

I located 3 headwords from SKJ which contain */futa/* (two) and 6 headwords with */mi/* (three). I could not find any sequential voicing involving these headwords. Also, the participants' results from the experiment confirm this. For instance, example 2 from Table 2, *futa+koto* (two words), does not exhibit sequential voicing, whereas *ko+goto* (a scolding) does. Likewise, example 2, *mi+kawa* (three rivers), does not show sequential voicing, whereas *o+gawa* (a stream) does. However, there are some exceptions. The typical counterexample raised by Nakagawa (1966) is *futa+go* (twins), but this can be easily explained by the hypothesis raised earlier. In this case, the semantic function of */futa/* is different from */futa/* found in other compounds mentioned earlier. Here, */futa/* does not mean 'two', but 'a pair of'.[7] Therefore, *futa+go* does not mean 'two children', but 'twins'. This explanation can also be applied to the case of *futa+ba* (a pair of buds).

The examination of the compounds consisting of native Japanese numeral prefixes and nouns, as well as the counterexamples, would seem to suggest that the type of semantic function of the first element affects the occurrence of sequential voicing. The data clearly show that native Japanese numeral prefixes disfavor sequential voicing, and this supports Nakagawa's proposal (1966) with concrete evidence.

4.2. NATIVE JAPANESE HONORIFIC AND BEAUTIFICATION PREFIXES

In order to answer the research question B, the native Japanese honorific or beautification prefixes, */o/* and */ma/*, were collected from SKJ and analyzed.

4.2.1. THE HONORIFIC PREFIX, /O/

Table 4 shows the lists of the headwords consisting of the native Japanese honorific prefix */o/* and nouns. I found 60 headwords from SKJ which begin with honorific prefix */o/*. Among these words, I cannot find any sequential voicing. The native speakers also agreed with this. For instance, example 11, *o+kuni* (hometown), does not exhibit sequential voicing whereas *yuki+guni* (snow country) does. Likewise, */o/* does not trigger sequential voicing in the case of example 40, *o+tera* (a temple) nor in example 47, *o+hana* (a flower), whereas *yama+dera* (a mountain temple) and *nama+bana* (fresh flowers) exhibit sequential voicing. These phenomena can also be explained by the semantic environments involved. By comparing the translations for the compounds consisting of the honorific prefix */o/* and nouns, and for the compounds occurring with other elements, it is clear that the honorific prefix */o/* does not attach particular meaning to the proceeding elements. */o/* beautifies the whole compound without changing the meaning of the second element. Moreover, it can be said that since */o/* works as a beautification technique, its presence disfavors voicing[8].

4.2.2. THE BEAUTIFICATION PREFIX, /MA/

Next, let us examine another native Japanese beautification prefix, */ma/*. I located 16 headwords from SKJ which begin with */ma/* (Table 5). In most compounds, */ma/* does not trigger sequential voicing. For instance, example 4, *ma+kusa* (beautiful grasses), does not exhibit sequential voicing whereas *mo+gusa* (algae) does. We can assume that */ma/* also does not trigger sequential voicing because */ma/* beautifies the whole compound without changing the meaning of the second element. However, we have to pay attention to the transformation of the semantic function of */ma/*. Originally in older Japanese, */ma/* had been used for beautification, and still retains that function in modern Japanese. Yet */ma/* has other meanings: 'pure', 'real',

'complete', and 'accurate', which highlight the meaning of the second element.[9] *Ma+gokoro* (a true heart) is an example of how this modification triggers sequential voicing. Moreover, in the case of *ma+gane* (black steel) and *ma+goi* (a black carp), sequential voicing occurs, since */ma/* attaches the meaning of 'black in these cases.[10] In addition, there are some words beginning with */ma/* which carry the meaning of 'edible', and these words exhibit sequential voicing.[11] However, in the case of examples 2, 7, 10, 11, 15, and 16, */ma/* modifies the second element with this more recent semantic function, yet these compounds do not exhibit sequential voicing, whereas these phenomena seem to be problematic for the hypothesis raised earlier. The fact that some examples of */ma/* as an adjectival prefix trigger sequential voicing, while others do not, can be interpreted as revealing that the semantic function of */ma/* is now in transition. Originally, */ma/* had only the beautification function, and disfavored sequential voicing. However, in modern Japanese, */ma/* carries other meanings and in some cases, triggers sequential voicing.

4.3. NATIVE JAPANESE ADJECTIVAL PREFIXES AND OTHER PREFIX-LIKE ELEMENTS

In order to confirm that only native Japanese numeral prefixes and honorific or beautification prefixes inhibit sequential voicing, all other compounds which begin with native Japanese prefixes or prefix-like elements were collected from SKJ and examined.

4.3.1. THE ADJECTIVAL PREFIXES, /OO/ (BIG), /KO/ (SMALL), AND /KO/ (SMALL)

I found 24 headwords from SKJ which begin with the native Japanese adjectival prefix, */oo/* (big). Table 6 clearly displays that */oo/* triggers sequential voicing[12]. Also, Tables 7 and 8 are lists of the compounds which begin with other native Japanese adjectival prefixes, */ko/* (small) and */o/* (small). Here, sequential voicing occurs, and the participants in my experiment agreed with this condition. Unlike numeral prefixes or honorific prefixes, these adjectival prefixes modify and change the meaning of the second elements. */oo/* (big), */ko/* (small), and */o/* (small) describe the size of the second elements, thus these native Japanese adjectival prefixes trigger sequential voicing.

4.3.2. THE PREFIX-LIKE ELEMENTS, /SAKI/ (THE FORMER), /MAE/ (THE FORMER), AND /ATO/ (THE LATTER)

Similar phenomena are observed from the data of prefix-like elements which attach the meaning of location, or the order of a sequence of events in Tables 9 and 10. I found 8 headwords from SKJ which begin with */saki/* (the point, the front, former), 10 headwords with */mae/* (the front, former), and 5 headwords with */ato/* (the back, latter, new). All of native Japanese prefix-like elements trigger sequential voicing. Again, the participants in my experiment confirmed this. Akin to the native Japanese adjectival prefixes discussed before, these prefix-like elements modify and change the meaning of the second elements. In particular, these first elements describe the property of the second elements in terms of temporal placement.

4.4. THE SEMANTIC FUNCTION OF PREFIXES AND SEQUENTIAL VOICING

Table 11 below shows the categorization of all native Japanese prefixes collected in this study according to their degree of semantic function. I roughly categorized these prefixes into two groups, namely, those with weaker semantic functions and those with stronger semantic functions. As discussed with examples earlier in this paper, prefixes with weaker semantic functions do not change the property of the second elements, but prefixes with stronger semantic functions do. The symbol ○ in the table indicates the occurrence of sequential voicing according to the results of my dictionary search as well as the experiment, where as × shows that there is no sequential voicing.

TABLE 11. The semantic function of the prefixes and sequential voicing

Weaker semantic function		Stronger semantic function	
/*hito*/ (one)	×	/*oo*/ (big)	○
/*futa*/ (two)	×	/*ko*/ (small)	○
/*mi*/ (three)	×	/*o*/ (small)	○
/*o*/ (honorific)	×	/*futa*/ (a pair of)	○
/*ma*/ (beautification)	×	/*ma*/ (black)	○
/*ma*/ (pure, real, complete...)	In transition?	/*ma*/ (edible)	○
/*oo*/ (beautification)	×	/*saki*/ (the former, front...)	○
		/*mae*/ (the former, front...)	○
		/*ato*/ (the later, back...)	○

As shown on the left side of the table, native Japanese prefixes with weaker semantic functions, such as numeral prefixes and honorific or beautification prefixes do not trigger sequential voicing. On the other hand, the other prefixes with stronger semantic functions on the right side of the table, such as the adjectival prefixes do. Now, it would seem that the semantic function of the prefixes affects the occurrence of sequential voicing. Even though /*ma*/ with the meaning of 'pure' or 'real' on the left side of the table shows some problematic counterexamples in accord with its transforming semantic functions, one can clearly see that it is crucial to take semantic functions into consideration when examining the occurrence of sequential voicing in native Japanese compounds.

5.0. CONCLUSION

The data from my dictionary search as well as the results from my experiment clearly show that the semantic function of prefixes has much to do with sequential voicing. Although there is a substantial number of studies regarding sequential voicing, scholars have overlooked the role of semantic functions.

Although this study is limited to the examination of native Japanese prefixes and their relationship with native Japanese nouns, this approach can be applied to the intersection of Japanese phonetics and semantics. Moreover, the apparent irregularities of sequential voicing may be lessened when one takes semantic function into account.

6.0. IMPLICATIONS FOR FUTURE STUDIES

We are now in a position to discuss the semantic function of native Japanese prefixes and how it is related to sequential voicing. However, historical transformation in terms of meanings and phonetics of these prefixes should not be ignored. Specifically, the honorific prefix /*o*/ originally was the phoneme, /*oo-mi*/ (/*on*/), and adjectival prefixes had /*no*/ after them as a conjunction. Further examination of how these phonological conditions in older Japanese had affected the occurrence of sequential voicing is certainly needed. Moreover, a deep investigation of the historical changes in the semantic function of the prefixes can clarify the determination of honorific or beautification function of the prefixes /*o*/, /*oo*/, and /*ma*/. With more concrete evidence on the semantic transformations of these prefixes, solid arguments on the counterexamples raised earlier can be developed.

Regarding the experiment involving native speakers of Japanese, when one can include some nonce compounds with these native Japanese prefixes as data, the judgment by participants and its relationship with the semantic function of prefixes may become clearer.

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NOTES

1. For an introduction to sequential voicing, see Vance (1987: 133-148), and for discussions on historical details, see Martin (1987: 83-120).
2. There are, however, a few instances of sequential voicing within Sino-Japanese prefix-base compounds. For detailed discussion, see Vance 1987: 140-142.
3. For instance, the honorific prefix /o/ can accompany nouns, e.g. *o+hasi* (chopsticks); verbs, e.g. *o+hanasisimasu* (to talk); and adjectives, e.g. *o+kirei* (beautiful).
4. An example with sequential voicing is *mukasi+banasi* (old story). (Vance 1987)
5. For instance, sequential voicing can be found in these compounds; *saki+goro* (recently); *mae+gami* (a bang); *ato+gama* (a successor).
6. For detailed discussion on sequential voicing in Old Japanese, see Vance (2002).
7. Thus, */futa/* in *futa+go* and *futa+ba* is often described with "双" instead of "二" in *kanji* writing style.
8. Since voiced sounds tend to be regarded as less pretty and sound more harsh, the beautification process disfavors it.
9. In *kanji* writing system, */ma/* is written as '真', which stands for 'truth'.
10. There is an argument regarding the actual meaning of */ma/* in these compounds. In my personal communication, Professor Alexander Vovin at the University of Hawai'i at Mānoa told me that */ma/* in these cases may stand for 'real' or 'pure', since real steel and real carp are originally black. According to Professor Vovin, */ma/* has not been an adjectival prefix historically, and this is why it does not trigger sequential voicing in many cases
11. For instance, */ma/* in *ma+dai* (a red sea bream), *ma+dake* (a bamboo), and *ma+dako* (an octopus) does not have the beautification function, but attaches the meaning of 'edible'.
12. There are, however, some exceptions. In *oo+sima* (a big island), *oo+tono* (a great lord), and *oo+hasi* (a big bridge), */o/* used as beautification thus does not trigger sequential voicing.

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Table 1: Native Japanese numeral prefix, /*hito*/ (one)

no sequential voicing	translations	sequential voicing with other elements	translations
1. hito+kakae⇒hitokakae (一抱え)	*one armload*		
2. hito+kasane⇒hitokasane (一重ね)	*one layer*	godan+kasane⇒godangasane (五段重ね)	*five layers*
3. hito+katamari⇒hitokatamari (一塊)	*one lump, one mass*		
4. hito+kawa⇒hitokawa (一皮)	*one layer of skin, hide, fur*		
5. hito+kire⇒hitokire (一切れ)	*one piece*	ki+kire⇒kigire (木切れ)	*piece of wood*
6. hito+kiwa⇒hitokiwa (一際)	*one side, still more*	ma+kiwa⇒magiwa (間際)	*at the last moment*
7. hito+kukuri⇒hitokukuri (一括り)	*one tied up thing*		
8. hito+kuti⇒hitokuti (一口)	*one bite*	oo+kuti⇒ooguti (大口)	*big mouth*
9. hito+koe⇒hitokoe (一声)	*one voice*	hito+koe⇒hitogoe (人声)	*people's voices*
10. hito+koto⇒hitokoto (一言)	*one utterance, one word*	ko+koto⇒kogoto (小言)	*reprimand (n.)*
11. hito+koro⇒hitokoro (一頃)	*at one time, formerly*	kono+koro⇒konogoro (この頃)	*recently*
12. hito+sakari⇒hitosakari (一盛り)	*one peak*	hana+sakari⇒hanazakari (花盛り)	*(to be in) full bloom*
13. hito+sashi⇒hitosashi (一刺し)	*one bite, one slice of raw fish*		
14. hito+tamari⇒hitotamari (一溜り)	*difficulty*	hito+tamari⇒hitodamari (人溜り)	*gathering place*
15. hito+te⇒hitote (一手)	*one hand*	hito+te⇒hitode (人手)	*someone's help*
16. hito+toori⇒hitotoori (一通り)	*in a general way, one way*	oo+toori⇒oodoori (大通り)	*big street*
17. hito+toki⇒hitotoki (一時)	*short time, one period*	gohan+toki⇒gohandoki (ご飯時)	*dinner time*
18. hito+ha⇒hitoha (一葉)	*one leaf*	ao+ha⇒aoba (青葉)	*green leaves*
19. hito+hata⇒hitohata (一旗)	*one flag*	te+hata⇒tebata (手旗)	*hand held flag*
20. hito+hana⇒hitohana (一花)	*one flower*	nama+hana⇒namabana (生花)	*fresh flower*
21. hito+fusa⇒hitofusa (一房)	*one bunch, one lock of hair*	hana+fusa⇒hanabusa (花房)	*kind of flower*
22. hito+fuyu⇒hitofuyu (一冬)	*one winter*	oo+fuyu⇒oobuyu (大冬)	*severe winter*
23. hito+hone⇒hitohone (一骨)	*hardship*	se+hone⇒sebone (背骨)	*backbone, spine*

Table 2: Native Japanese numeral prefix, */futa/* (two)

no sequential voicing	translations	sequential voicing with other elements	translations
1. futa+ki⇒futaki(二木)	*two trees*	sakura+ki⇒sakuragi(桜木)	*cherry tree*
2. futa+koto⇒futakoto(二言)	*two words*	ko+koto⇒kogoto(小言)	*reprimand (n.)*
3. futa+se⇒futase(二瀬)	*two rapids*		

Table 3: Native Japanese numeral prefix, */mi/* (three)

no sequential voicing	translations	sequential voicing with other elements	translations
1. mi+kasa⇒mikasa(三笠)*	*three woven hats*	hana+kasa⇒hanagasa(花笠)	*woven hat with flowers*
2. mi+kawa⇒mikawa(三川)	*three rivers*	o+kawa⇒ogawa(小川)*	*stream*
3. mi+ki⇒miki(三木)*	*three trees*	kashiwa+ki⇒kashiwagi(柏木)*	*oak tree*
4. mi+ke⇒mike(三毛)	*three-colored fur (calico)*	natsu+ke⇒natsuge(夏毛)	*summer fur*
5. mi+haru⇒miharu(三春)	*three springs*		
6. mi+fuyu⇒mifuyu(三冬)	*three winters*		

*Also a proper noun.

Table 4: Native Japanese honorific prefix, /o/ (honorific)

no sequential voicing	translations	sequential voicing with other elements	translations
1. o+kaasan⇒okaasan(お母さん)	*mother*		
2. o+kaiko⇒okaiko(お蚕)	*silkworm*		
3. o+kaka⇒okaka(おかか)*	*dried bonito*		
4. o+kakure⇒okakure(お隠れ)	*emperor's death*	kumo+kakure⇒kumogakure(雲隠れ)	*disappearance*
5. o+kashira⇒okashira(お頭)	*leader, boss, chief*	hata+kashira⇒hatagashira(旗頭)	*leader, boss, chief*
6. o+kane⇒okane(お金)	*money*	ko+kane⇒kogane(小金)	*small money*
7. o+kama⇒okama(お釜)	*pot, caldron*		
8. o+kara⇒okara(おから)*	*tofu refuse*	tori+kara⇒torigara(鶏殻)	*chicken-bone bouillon*
9. o+kawari⇒okawari（おかわり）	*refill, seconds*		
10. o+kimari⇒okimari(お決まり)	*decision, favorite*		
11. o+kuni⇒okuni(お国)	*hometown*	yuki+kuni⇒yukiguni(雪国)	*snow country*
12. o+kura⇒okura(お蔵)	*storehouse, granary*	kome+kura⇒komegura(米蔵)	*rice granary*
13. o+kurumi⇒okurumi(おくるみ)	*baby cloth*		
14. o+ko⇒oko(お子)	*child*	oni+ko⇒onigo(鬼子)	*demon child*
15. o+koe⇒okoe(お声)	*voice*	oo+koe⇒oogoe(大声)	*loud voice*
16. o+kokoro⇒okokoro(お心)	*heart*	shita+kokoro⇒shitagokoro(下心)	*secret intention, desire*
17. o+koshi⇒okoshi(お腰)	*waist*	yanagi+koshi⇒yanagigoshi(柳腰)	*slender figure*
18. o+konomi⇒okonomi(お好み)	*favorite*		
19. o+sai⇒osai(お菜)*	*side dish*	soo+sai⇒soozai(惣菜)	*everyday dish*
20. o+sakana⇒osakana(お魚)	*fish*	ao+sakana⇒aozakana(青魚)	*shiny fish*
21. o+satsu⇒osatsu(お札)	*bill, bank note*		
22. o+sato⇒osato(お里)	*hometown*	mura+sato⇒murazato(村里)	*country side*
23. o+saru⇒osaru(お猿)	*monkey*	megane+saru⇒meganezaru(メガネザル)	*tarsier monkey*
24. o+shioki⇒oshioki(お仕置き)	*punishment*		
25. o+shikise⇒oshikise(お仕着せ)	*clothes*		
26. o+shime⇒oshime(おしめ)	*diaper*		
27. o+syaku⇒osyaku(お酌)	*filling somebody's cup*	te+syaku⇒tejaku(手酌)	*filling one's own cup*
28. o+syare⇒osyare(お洒落)	*dressing up, fashion*	waru+syare⇒warujare(悪洒落)	*unfashionable*
29. o+sumitsuki⇒osumitsuki(お墨付き)	*guarantee*		

Table 4: Contd.

no sequential voicing	translations	sequential voicing with other elements	translations
30. o+sora⇒osora(お空)	*sky*	ao+sora⇒aozora(青空)	*blue sky*
31. o+takara⇒otakara(お宝)	*treasure*	ko+takara⇒kodakara(子宝)	*children*
32. o+taku⇒otaku(お宅)	*someone else's house*		
33. o+tama⇒otama(お玉)	*ball*	aka+tama⇒akadama(赤玉)	*red ball*
34. o+chichi⇒ochichi(お乳)*	*breasts, breast milk*	sashi+chichi⇒sashijichi(差し乳)	*wet-nurse*
35. o+tsukuri⇒otsukuri(お造り)	*structure, dish of raw fish*	ichiboku+tsukuri⇒ichibokudukuri (一木造り)	*statue made of one piece of wood*
36. o+tsumori⇒otsumori(お積り)	*calculation*	oo+tsumori⇒oodumori(大積り)	*big calculation*
37. o+tsuri⇒otsuri(お釣り)	*change(money)*		
38. o+temae⇒otemae(お手前)	*in front of (a person)*		
39. o+temoto⇒otemoto(お手元)	*near (a person)*		
40. o+tera⇒otera(お寺)	*temple*	yama+tera⇒yamadera(山寺)	*temple on a mountain*
41. o+tenki⇒otenki(お天気)	*weather*		
42. o+toosan⇒otoosan(お父さん)	*father*		
43. o+toori⇒otoori(お通り)	*someone's passing by*	hito+toori⇒hitodoori(人通り)	*people passing by*
44. o+ha⇒oha(お葉)*	*leafy vegetable*	oo+ha⇒ooba(大葉)	*perilla*
45. o+hashi⇒ohashi(お箸)	*chopsticks*	sai+hashi⇒saibashi(菜箸)	*cooking chopsticks*
46. o+hako⇒ohako(お箱)	*box*	oo+hako⇒oobako(大箱)	*big box*
47. o+hana⇒ohana(お花)	*flower*	nama+hana⇒namabana(生花)	*fresh flower*
48. o+harai⇒oharai(お払い)	*purification*	hito+harai⇒hitobarai(人払い)	*having an exclusive meeting*
49. o+hiki⇒ohiki(お引き)	*present guest receives at wedding*	fuku+hiki⇒fukubiki(福引き)	*raffle*
50. o+hisama⇒ohisama(お日様)	*sun*		
51. o+hitashi⇒ohitashi(おひたし)*	*boiled spinach*	mizu+hitashi⇒mizubitashi(水浸し)	*water soaked floor*
52. o+hina⇒ohina(お雛)	*doll*	me+hina⇒mebina(雌雛)	*girl doll*
53. o+hineri⇒ohineri(おひねり)	*tip*		
54. o+hime⇒ohime(お姫)	*princess*		

Table 4: Contd.

no sequential voicing	translations	sequential voicing with other elements	translations
55. o+himo⇒ohimo(お紐)	*string, cord*		
56. o+hiya⇒ohiya(お冷や)	*glass of cold water*		
57. o+hiraki⇒ohiraki(お開き)	*end of a party*	kannon+hiraki⇒kannonbiraki (観音開き)	*kannon-style shelf*
58. o+hiru⇒ohiru(お昼)	*daytime*		
59. o+fune⇒ofune(お船)	*ship*	ko+fune⇒kobune(小船)	*small ship*
60. o+heya⇒oheya(お部屋)	*room*	sumoo+heya⇒sumoobeya(相撲部屋)	*sumo group*

*Historically, these words had been used by only women, but are now lexicalized and freely used by both men and women. (*Nyooboo-kotoba*)

Table 5: Native Japanese honorific prefix /*ma*/ (beautification, pure, complete, accurate, and edible)

no sequential voicing	translations	sequential voicing with other elements	translations
1. ma+ki⇒maki(真木)	*real tree*	kashiwa+ki⇒kashiwagi(柏木)	*oak tree*
2. ma+kita⇒makita(真北)	*due North*		
3. ma+kui⇒makui(真杭)	*great post, stake*	oo+kui⇒oogui(大杭)	*big post, stake*
4. ma+kusa⇒makusa(真草)	*beautiful grass*	mo+kusa⇒mogusa(藻草)	*algae, seaweed*
5. ma+kushi⇒makushi(真櫛)	*beautiful comb*		
6. ma+kuwa⇒makuwa(真桑)	*beautiful mulberry tree*		
7. ma+ko⇒mako(真子)	*real eggs*		
8. ma+saru⇒masaru(真猿)	*beautiful monkey*	megane+saru⇒meganezaru(メガネザル)	*tarsier monkey*
9. ma+shio⇒mashio(真塩)	*delicious salt*	ara+shio⇒arajio(粗塩)	*course salt*
10. ma+shita⇒mashita(真下)	*right under*		
11. ma+shiro⇒mashiro(真白)	*completely white*	iro+shiro⇒irojiro(色白)	*white skin*
12. ma+tama⇒matama(真玉)	*beautiful ball*	ao+tama⇒aodama(青玉)	*blue ball*
13. ma+toko⇒matoko(真床)	*beautiful bed*	ne+toko⇒nedoko(寝床)	*bed for sleeping*
14. ma+tori⇒matori(真鳥)	*beautiful bird*	umi+tori⇒umidori(海鳥)	*sea bird*
15. ma+hiru⇒mahiru(真昼)	*mid-day*		
16. ma+fuyu⇒mafuyu(真冬)	*mid- winter*		

Table 6: Native Japanese adjectival prefix, /*oo*/ (big)

sequential voicing	translations	sequential voicing	translations
1. oo+kai⇒oogai(大貝)	*big shell*	14. oo+te⇒oode(大手)	*big hand*
2. oo+kakari⇒oogakari(大掛かり)	*large scale*	15. oo+toori⇒oodoori(大通り)	*big street*
3. oo+kasa⇒oogasa(大傘)	*big umbrella*	16. oo+toshiyori⇒oodoshiyori (大年寄り)	*very superior person*
4. oo+kata⇒oogata(大型)	*large (i.e., car)*	17. oo+ha⇒ooba(大葉)	*perilla*
5. oo+kane⇒oogane(大鐘)	*big bell*	18. oo+hako⇒oobako(大箱)	*big box*
6. oo+kuti⇒ooguti(大口)	*big mouth*	19. oo+hanashi⇒oobanashi(大話)	*exaggerated story*
7. oo+koe⇒oogoe(大声)	*loud voice*	20. oo+fuseri⇒oobuseri(大ぶせり)	*sick for a long time*
8. oo+koto⇒oogoto(大事)	*terrible/important incident*	21. oo+fune⇒oobune(大船)	*large ship*
9. oo+sake⇒oozake(大酒)	*large amount of liquor*	22. oo+furumai⇒ooburumai (大振る舞い)	*big action*
10. oo+shikake⇒oojikake(大仕掛け)	*(on) a large scale*	23. oo+heya⇒oobeya(大部屋)	*big room*
11. oo+sumoo⇒oozumoo(大相撲)	*big sumo tournament*	24. oo+hora⇒oobora (大法螺)	*big lie, exaggeration*
12. oo+sora⇒oozora(大空)	*big sky*		
13. oo+tate⇒oodate(大盾)	*big shield*		

Table 7: Native Japanese adjectival prefix, /ko/ (small)

sequential voicing	translations	sequential voicing	translations
1. ko+katana⇒kogatana(小刀)	*small sword*	13. ko+shiwa⇒kojiwa(小皺)	*small wrinkle*
2. ko+kane⇒kogane(小金)	*small amount of money*	14. ko+sumoo⇒kozumoo(小相撲)	*children's sumo*
3. ko+kamo⇒kogamo(小鴨)	*small duck*	15. ko+soo⇒kozoo(小僧)	*young monk*
4. ko+kiku⇒kogiku(小菊)	*small chrysanthemum*	16. ko+taiko⇒kodaiko(小太鼓)	*small drum*
5. ko+koto⇒kogoto(小言)	*small reprimand*	17. ko+tikara⇒kojikara(小力)	*little energy*
6. ko+saka⇒kozaka(小坂)	*slight slope*	18. ko+tsukai⇒kozukai(小遣い)	*allowance*
7. ko+sakana⇒kozakana(小魚)	*small fish*	19. ko+tsukuri⇒kozukuri(小造り)	*(on) a small scale*
8. ko+sakura⇒kozakura(小桜)	*small cherry blossom*	20. ko+tsuti⇒kozuti(小槌)	*small hammer*
9. ko+samurai⇒kozamurai(小侍)	*young warrior*	21. ko+tsutsumi⇒kozutsumi(小包)	*small parcel*
10. ko+sara⇒kozara(小皿)	*small plate*		
11. ko+shita⇒kojima(小島)*	*small island*		
12. ko+shiro⇒kojiro(小城)	*small castle*		

*Also a proper noun.

Table 8: Native Japanese adjectival prefix, /o/ (small)

sequential voicing	translations	sequential voicing	translations
1. o+kasa⇒ogasa(小笠)*	*small woven hat*	6. o+shima⇒ojima(小島)*	*small island*
2. o+kawa⇒ogawa(小川)	*small river*	7. o+ta⇒oda(小田)*	*small rice field*
3. o+kusa⇒ogusa(小草)	*small grass*	8. o+tani⇒odani(小谷)*	*small valley*
4. o+kura⇒ogura(小倉)*	*small stock-house*	9. o+hashi⇒obashi(小橋)*	*small bridge*
5. o+sasa⇒ozasa(小笹)	*small bamboo leaf*	10. o+fune⇒obune(小舟)	*small boat*

*Also a proper noun.

Table 9: Prefix-like elements, */saki/* (the point, the front, former) and */mae/* (the front, former)

sequential voicing	translations	sequential voicing	translations
1. saki+kai⇒sakigai(先買い)	*first buy*	1. mae+kami⇒maegami(前髪)	*bangs*
2. saki+koro⇒sakigoro(先頃)	*sometime before*	2. mae+kari⇒maegari(前借り)	*receiving wages in advance*
3. saki+some⇒sakizome(先染め)	*first dyeing*	3. mae+koshi⇒maegoshi(前腰)	*front part of hakama*
4. saki+tsuna⇒sakizuna(先綱)	*front part of a rope*	4. mae+sumoo⇒maezumoo(前相撲)	*first sumo*
5. saki+tori⇒sakidori(先取り)	*anticipation*	5. mae+taoshi⇒maedaoshi(前倒し)	*front-loading*
6. saki+hashiri⇒sakibashiri(先走り)	*being ahead*	6. mae+toori⇒maedoori(前通り)	*previous way*
7. saki+hara⇒sakibara(先腹)	*child from a former wife*	7. mae+ha⇒maeba(前歯)	*front teeth*
8. saki+fure⇒sakibure(先触れ)	*previous notice*	8. mae+harai⇒maebarai(前払い)	*payment in advance*
		9. mae+hi⇒maebi(前日)	*previous day*
		10. mae+fure⇒maebure(前触れ)	*previous notice*

Table 10: Prefix-like element, */ato/* (the back, later, new)

sequential voicing	translations
1. ato+kaki⇒atogaki(後書き)	*post script*
2. ato+kane⇒atogane(後金)	*late payment*
3. ato+kama⇒atogama(後釜)	*successor*
4. ato+hara⇒atobara(後腹)	*child from the current wife*
5. ato+harai⇒atobarai(後払い)	*late payment*

II. English

FINDING THEIR WAY TO THE WRITING CENTER: LANGUAGE PERCEPTIONS OF PIDGIN SPEAKERS AND NON-NATIVE SPEAKERS FROM ASIAN COUNTRIES

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At our Writing Center at the University of Hawai'i at Mānoa, there are remarkably few Hawai'i Creole or Pidgin speaking visitors, whereas more than half of our clientele are non-native speakers from Asian countries. In a project I have undertaken, I argue that while negative perceptions about Pidgin affect native Pidgin speakers' willingness to visit the Writing Center, non-native speakers (NNSs) from Asian countries operate under the perception that seeking help from the Writing Center does not negatively label them.

In this project, I have undertaken the task of writing about two groups of people to which I don't belong. Although I have lived, played and worked with both Hawai'i's native Pidgin speakers and non-native speakers from Asian countries throughout my life, I am Caucasian, or haole, a Hawaiian word meaning "White person, American, [or] English" (Pukui and Elbert 58). The subject of my research is close to me; however, I also realize that it is impossible for me to speak for others completely unencumbered by my own biases. As Gesa Kirsch argues, "Scholars inevitably interpret and appropriate participants' stories in context of their work, filter interviewees' comments through their rhetorical framework, and analyze participants' narratives based on their own knowledge, training, and lived experiences" (49). I come to this work with a specific set of experiences and a hypothesis I wish to analyze that affects the way I interpret my subjects and their comments. Therefore, in an attempt to position myself within the context of my research, I will explain my relationship to both the research topic and the groups I have chosen to work with.

Since the fall of 2001 I have worked as a tutor at the University of Hawai'i at Mānoa's Writing Center. As someone who grew up in Hawai'i, I have always been aware of the perceptions surrounding Pidgin or Hawai'i Creole (HC), a language spoken by many *local* residents of Hawai'i. Pidgin is an essential part of our group identity–of being local, a complex and contentious term in Hawai'i. In her article "Asian Settler Colonialism in Hawai'i," Candace Fujikane defines local as "a geographical marker designating ethnic groups from Hawai'i" (xxii), which includes Hawaiians, Asians, Haoles, Portuguese and other peoples who have strong connections to the islands. It is important to stress, however, that while all Native Hawaiians who reside in Hawai'i are local, not all locals are Native Hawaiian. Although there are federal definitions relating to blood quantum,[1] "Native Hawaiian" and "Hawaiian" invariably refer to people of Hawaiian ancestry. In this paper, I use Native Hawaiian to refer to all people of Hawaiian ancestry regardless of blood quantum as Fujikane does in her article, "Reimagining Development and the Local in Lois-Ann Yamanaka's Saturday Night at the Pahala Theatre" (58). Although I am a native Standard English speaker, in certain situations, specifically when I am in places where local values rather than academic or professional ideals are dominant, I use my best Pidgin to show that I belong as a local.

Despite the sense of belonging that speaking Pidgin fosters, it has also received bad press from educators. Scholars such as Karen Ann Watson-Gegeo (1994) have written about how Pidgin has been blamed for low standardized test scores, poor academic performance and poor writing skills. In 1999, Hawai'i's Board of Education Chairman, Mitsugi Nakashima, warned "If people speak pidgin English, they will think pidgin English and will then write in pidgin English" a viewpoint which suggests that many Pidgin speakers are not acculturated into academia. These negative markers associated with Pidgin, which I have grown up with, led me to the assumption that Pidgin speakers would be regular visitors to the writing center–that they would be coming for help to overcome the challenges they faced within the academy. Anne DiPardo argues that writing tutors are "[o]ften placed on the front lines of efforts to provide respectful, insightful attention to . . . the social and linguistic challenges which inform [non-Anglo students'] struggles with writing" (350). I was on the front line, and I was ready to help–but who I was helping was different than whom I was expecting. I became very aware of who was visiting our Writing Center, and from my vantage point, it was not Pidgin speakers but mostly non-native speakers from Asian countries, specifically from Japan, Korea and China. Having lived in Japan for ten years myself, I know what it is like to be a NNS in a foreign country, and to want to seek out help with writing. However, I was surprised that the number of NNS from Asian countries so outweighed the number of Pidgin speakers visiting the Writing Center. During the fall 2002 semester, approximately 60% of

the visitors to the Writing Center were NNS from Asian countries whereas only 7% admitted to speaking Pidgin (*Writing Center Database*).

The story of Pidgin is imbedded within political, social and cultural contestation. Hawai'i's colonized history played an essential role, not only in its development, but also in the resulting marginalization of Pidgin as a language and of those who speak it. Pidgin evolved around events that led to the almost complete annihilation of Native Hawaiians and their culture[2] through the banning of the hula by the missionaries, the overthrow of their monarchy by American businessmen and the United States marines in 1893, and the banning of the Hawaiian language in 1896. Pidgin became the shared language for the immigrants brought to Hawai'i by the North American plantation owners as laborers. Space constraints prevent me discussing the history of Pidgin in the detailed manner that would do justice to the complexity surrounding the evolution of and attitudes about Pidgin.[3] Through its role as a shared language among the people who settled in Hawai'i and many Native Hawaiian communities, Pidgin has grown to be an important part of *local* identity. At the same time, many sociolinguistic scholars, such as Charlene Sato (1985), argue that, for many in the community, Pidgin is stigmatized as a deficient form of English and is frequently blamed for Hawai'i's local students' poor academic performance. She states, "many [Pidgin] speakers have come to perceive their home language as a way of speaking to be corrected and eventually overcome . . . over the years, . . . [Pidgin] has been . . . forbidden in the classroom, declared not a language, [and] branded un-American" ("Linguistics" 267). The ambiguous positioning of the language, positively as an identity marker and negatively as a label suggesting linguistic and academic inferiority, influences attitudes toward Pidgin today, and the complexities are apparent in the interviews I conducted with Writing Center visitors.

In this project, I interviewed five students who visited the Writing Center over the last year. Information on each Writing Center visitor, including name, first language, and grade level is kept in our database, which I used to profile potential interviewees. In an effort to fairly represent both non-native speakers from Asian countries and Pidgin speakers, I chose one undergraduate and graduate student for each language group. However, after conducting the interviews with the Pidgin speakers, I realized that both students had attended private high schools. I then located a Pidgin speaker who had visited the Writing Center and had graduated from a public school; this brought the total to five interviewees.

What became increasingly apparent to me in all my interviews is the misconception that the Writing Center is primarily a space for second language students. Some recent scholarship conflates students whose language puts them in a marginalized position, such as Pidgin speakers, with international students and claims both student populations operate under the same paradigm. Judith Kilborn argues that, "minority and international students, who already feel labeled by virtue of their race, language, or cultural background, are unlikely to attend services which stamp them with yet another label" (395). However, the presumption that the Writing Center is a place specifically designed to help second language students seems to play a significant role in perceptions about labeling associated with visiting the Writing Center. Jen, a Pidgin speaking graduate student, states, "when I went [to the writing center] I noticed that it's for people like ESL people, people that don't know how to speak English." Mariko, a Japanese graduate student, also thought the writing center was designed specifically to help second-language students, but she went further and talked about how this affected the way she viewed native speakers whom she saw at the writing center; she says, "[I]f I'm native and my professors said you need to talk to someone about your paper before you turn it in, and then . . . if I have been to the [center and] I see all the foreign students and if I'm the only one, the native speaker, I'm maybe not comfortable. . . . One time last semester, someone was talking perfect English [in the writing center] and I thought is this a place for native speakers too? . . . I assume the [center] is for foreigners."

Although this perception about the Writing Center is inaccurate, it can have far reaching implications. The idea that the Writing Center is geared toward helping non-native speakers implies the unsaid notion that there might be something wrong with those who are not considered non-native speakers and visit the writing center. The fact that Pidgin is largely considered to be a substandard form of English rather than a second language puts Pidgin speakers in the category of native speaker. Therefore, Pidgin speakers are likely to associate negative labels with visiting the Writing Center if it is indeed seen as a place only for second language speakers. Carrie, an undergraduate Pidgin speaker who graduated from public high school on Maui, talks about the confusion that surrounds Pidgin in relation to Standard English, and the assumptions that Pidgin speakers should not need help with Standard English; she says "a foreign language person knows that it's OK [to get

help with writing] because they don't know the English language but a Pidgin person does basically know . . . well, not basically, but they more or less have spoken it all their life but they have the Pidgin." This is a sentiment echoed by Mariko who states, "[for] most of the native speakers, even Pidgin or whatever . . . English is their first language." Moreover, many Pidgin speakers position Pidgin negatively in comparison to Standard English. Throughout our interview, Jen refers to Standard English as proper English, she tells me, "I went to a private school . . . its kind of like a mainland school, . . . and they teach you very proper English." Then, she states, "I speak a lot of Pidgin when I'm with my friends [but in the classroom] I try to act more proper." For Jen, and many other locals, Standard English is called proper English, subversively suggesting that Pidgin is improper.

This scenario may offer one possible explanation why *local* students are visiting the Writing Center at such low rates. Moreover, it is reminiscent of observations made by Stephen North in his 1984 article, "The Idea of a Writing Center," where he argues that faculty perpetuate the viewpoint that the writing center's main work is to deal with grammar and "bad or "remedial" writers. North discusses misperceptions about writers and the writing center and how students frequently get sent to the writing center to have "their papers 'cleaned-up,'" and of "well-intentioned administrators who are so happy that we deal with . . . 'grammar'" (63). This idea that the writing center's purpose is to deal with grammar issues is compounded by the perception that it also primarily services remedial writers. North argues, "In [some faculty's] minds, clearly, writers fall into three fairly distinct groups: the talented, the average, and the others; and the writing center's only logical *raison d'être* must be to handle those others–those . . . with 'special' problems" (65). The irony here is that these misperceptions about the writing center manifest in negative labels being associated with visiting the center. As articulated by the students I interviewed, it is acceptable for some students to need help with grammar and be remedial in writing, specifically non-native speakers, while it is not for others, specifically Standard English speakers, which many presume Pidgin speakers to be. Students like Mariko do not feel that needing help with grammar labels a non-native speaker the same way it does a Pidgin speaker, she says, "I don't mind to go to the writing [center] to check my English grammar, but if I had a problem with my Japanese writing, I don't want to go to the Japanese writing [center]."

The persistence of misunderstanding about the true purpose of the writing center is intricately related to the misconceptions about who the writing center is meant to service. That the writing center is frequently seen as a place where students go to "fix" their papers rather than discuss their writing complicates this situation; after all, when something needs to be fixed, it usually means it's broken. If grammar is thought to be the primary focus of the tutoring session, a viewpoint often perpetuated by faculty, we can easily see how non-native speakers would be more comfortable than Pidgin speakers visiting the Writing Center. Pidgin speakers already see their language as deficient compared to "proper" English—thus, needing help with broken writing would compound negative labels associated with Pidgin. For non-native speakers, the situation is quite different since they don't see their native language as being a problem—they are not expected to have command of the English language and, therefore, it is perfectly acceptable for them to need help with their English writing.

The problem here is twofold: first, the purpose of the writing center is misunderstood; it is seen as a place where remedial writers go for help; and second, it is more acceptable for certain student populations to fall into the category of remedial than it is for others. Kilborn argues, "it is essential that these students, ["those labeled by race, language, or cultural background"], in particular, do not see our centers as remedial" (395). To overcome these misperceptions we need to vigilantly educate students about the writing process and the ideology the writing center is built upon. Moreover, in Hawai'i, as well as other places where a student population whose home language has not been privileged by the academy exists, special attention must be directed at how these students are made to feel about their language and how that might be affecting their willingness to seek help with writing. Changes must be effected to counter the perception that the writing center is only meant to service a particular type of student. While it is obvious that tutors need to be sensitive to social attitudes affecting how a writer negotiates him/herself, the tutor must first have the opportunity to work with the writer, which means the writer has to feel welcome at the writing center. I don't have any easy answers as to how to address these issues; however, I hope coming closer to identifying the problem is a start.

NOTES

1. Reprinted with permission from The Writing Lab Newsletter, Purdue University.
2. Native Hawaiian is defined in section 201(a)(7) of the Hawaiian Home Commission Act, 1920, ch 42, 42 Stat. 109, reprinted in 15 HAW. REV. STATE. Ann. 331 (Mitchie 1997) . . . persons with 50% or more Hawaiian blood; this suggests that Part-Hawaiian, or Hawaiian refers to persons with less than 50% blood quantum.
3. David Stannard has dedicated his book *Before the Horror*, to supporting his, and many other scholar's claims that the pre-contact Native Hawaiian population was somewhere between 800,000 and 1,000,000, but by 1900, the population of Native Hawaiians and Part-Hawaiians had declined to 37,656 (Kawamoto 193).
4. In 1853, the first plantation at Koloa, Kaua'i was established marking the beginning of Hawai'i's plantation era in the archipelago (Reinecke 39). Throughout the later part of the 1800's through the turn of the century Chinese, Portuguese, Korean, Japanese and Filipino laborers were brought to Hawai'i to work on the plantations. The need to communicate between the groups and with the plantation owners created the perfect conditions for the establishment of a Creole, what would eventually become Hawai'i Creole or Pidgin. At the same time as the immigrants began arriving, English was replacing Hawaiian as the language of power and prestige (Reinecke 32). The overthrow of the Hawaiian Monarchy (1893) and the subsequent banning of the Hawaiian language (1896) disempowered Hawaiians in their own land. The privileged language in Hawai'i became English, and Pidgin was perceived as deficient and inferior.

   In 1924, The Caucasian community, whose children were attending public schools, began expressing concern that "Caucasian children should not be interacting with Pidgin English-speaking 'local' children" (Kawamoto 201). This eventually led to the establishment of the English Standard Schools in 1924, where children had to pass English proficiency tests in order to be admitted. The schools were attended "almost exclusively by Caucasian children," and "further stratified Hawaiian society" (Kawamoto 202). These schools were abolished in 1948, but the stigmas attached to Pidgin in relation to education were entrenched in the community. After W.W.II, there was a dramatic push for Americanization by the local community, and to be American meant speaking Standard English. This drive to become American culminated in statehood in 1959. In 1987, Pidgin was a hot issue in education once again–the Board of Education tried to mandate that Standard English be the official language of instruction in all classrooms, and that Pidgin be forbidden. This move was met with a tremendous outcry from the community and the mandate was watered down to a strong recommendation (Sato 1991, 653-654).

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III. Languages and Literatures of Europe and the Americas

LEARNING LANGUAGE THROUGH LITERATURE: TO USE OR NOT TO USE A PUBLISHED TRANSLATION

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ABSTRACT

This paper deals with the advantages of using a translation published in one's native language in addition to the original text, glossaries and dictionaries when learning a non-spoken language for reading knowledge via literature. This assertion of advantage is supported by comparison and contrast of my own experience in learning Medieval Welsh with the aid of published translations and beginning to learn Old English without that aid. Also supporting this position are a number of practical examples that will enable a reader with no prior knowledge of either of these non-spoken languages to confidently and successfully make preliminary connections and thereby overcome the intimidation that often accompanies being confronted with an unknown language. Because non-spoken languages are frequently considered obscure (even those that closely resemble their modern counterparts, as is the case with Medieval and Modern Welsh) or have little demand, traditional classroom language learning is either unavailable or impractical. With these languages, whatever instruction does exist is also far less interactive than with more 'popular' languages, and the majority of knowledge transmission occurs during translation exercises done by the student himself. Without thoroughly studying and absorbing the grammar beforehand, a student in this scenario won't always be certain whether his translation is correct, even with the best of glossaries. Additionally, experts will not always be available for consultation. The published translation is therefore a crucial tool with this mode of learning, since it enables the learner not only to self-correct but also to more quickly gain confidence and fluency.

The following paper appears as presented in-progress in April 2003 after two months' preliminary research. Substantial additional research and revision are expected to follow.

When learning languages in a traditional classroom setting, approximating total immersion reaps a number of real benefits. Using nothing but the target language in the classroom, even when explaining grammar, eventually leads to a more intuitive grasp of the language by the student and less of a tendency to 'translate out' of the native language. The focus is on communication in the new language, and the more that occurs, the better. Saturation, trial and error, being unafraid to make mistakes, and being able to learn from mistakes are important elements in preparing a student to function and hopefully flourish in real-life second language settings. The experience is very similar to being a child again, learning to get around in the world. This is generally reflected in second language course expectations, where learners are not required to employ many higher order thinking skills until they have had sufficient time to adjust to using the new language.

Learning a language for reading knowledge and eventual fluency has an altogether different dynamic, especially if done by way of translating literature. The focus is not on communication but on comprehension and development of symbol and visual pattern recognition skills with the given language, not only of vocabulary but also of grammatical constructs. Although trial and error are always effective learning tools, excessive errors and ineffective guessing can impede comprehension. A person learning language through literature wants and needs to understand as much as possible of what is being read in the target language.

In learning a language this way, one could still argue that immersion is best (in this case, reading the language and experiencing it in as pure a form as possible), and that bridging the new language with the native language should occur in as limited a way as possible. Such an argument would support the prior reading of a grammar guide about the target language as being crucial to understanding what is being read and translated and would also advocate the use of glossaries and dictionaries—after all, there have to be reasonable frames of reference. However, gradually the reader should absorb the vocabulary, and by the time a given term has occurred four or five times in the text, it should be committed to memory. Grammatical constructs, as explained in the grammar guide, should be available for recall whenever examples in the text are encountered. There are people in the world who can learn a language this way. There are many, however, who cannot.

In any learning environment, unnecessary frustration is something that needs to be prevented at all costs. If readers of a text in a new language have no idea how a given phrase or sentence comes together, they might not feel very encouraged to continue. Even worse, incorrect guesses tend to lead to further incorrect guesses, and if there's no expert readily available to consult, the student's foundation will be shaky at best.

Dictionaries and glossaries are excellent reading and translation aids in this capacity, but they don't help much with syntax. Grammar guides are loaded with information on syntax, but one usually has to know what to look for. Also, as has already been touched upon, grammar guides can be quite difficult to absorb and sometimes even to understand, especially when first working and becoming familiar with a new language. There is a source, however, that fills in the gaps and can even replace expert instruction if used responsibly: the published translation.

Used as a crutch, of course, translations published in the learner's native language could certainly detract from a new language learning experience. What detracts more from any learning experience, though, is lacking knowledge that could otherwise be readily available. To this end, a published translation can be just as powerful a tool as a dictionary, glossary or grammar guide. In fact, it ends up being something of a syntactic dictionary, a combination dictionary, grammar guide and language expert.

A hands-on example elucidates this point well. The following is a passage from *Pwyll Pendeuic Dyuet*, a Middle Welsh text. This first example contains just the texts and glossary, and the reader should imagine that these are the only sources.

"E mysc hynny wynt a glywssont chwedlydaeth y wrth
Riannon ac am y phoen. Sef a wnaeth Teirnon Twryf Uliant,
o achaws y douot a gawssei, ymwarandaw am y chwedyl ac
amouyn yn lut ymdanaw, yny gigleu gan lawer o
luossogrwyd o'r a delei y'r llys mynychu cwynaw truanet
damwein Riannon a'y phoen" (Thomson 20).

a: who, which, that, and, with, as, whether
a'y (contr.): and her
ac: and
achaws (n): cause, reason
am: about, concerning, as regards, for
amouyn (vn): inquire
cwynaw (vn): complain, lament
chwedlydaeth (y wrth): news (about)
chwedyl (n): news, report
damwein (n): accident, misfortune, occurrence
delei (vn, dyuot): come (impf. sj. 3 sg.)
douot (n): prize, find
e mysc hynny: thereupon
gan (prep.): with, by
gawssei (cawssei; vn, cael): get, obtain, have, reach (plpft. 3 sg.)
gigleu (kigleu; vn, clybot): hear (3 sg.)
glywssont (clywssont; vn, clybot): hear (3 pl.)
gwnaeth (vn; gwneuthur): do, make, bring about, play (3 sg.)
lawer (llawer, n): much, a gretat deal, many
llys (n): court
luossogrwyd (lluosogrwyd, n): crowd, multitude (**llawer o luossogrwyd**: very many people)
lut (llut)*: *no gloss found, see translations below*
mynychu (vn): increase, grow frequent
o (prep.): of, from, consisting of, by means of, if
o'r: *precedes/introduces clause*
phoen (poen, n): penance, punishment
sef (ys ef): this is, it is ... that
truanet (a., eqv.): how pitiful
wrth (prep.): to, according to, at
wynt: they
y: 3 sg. m. poss. pron; (prep.) to, with; rel. part.; that; precedes indef. compl.; def. art.; preverbal part.
ymdanaw (amdanaw, prep.): about, on, for, on account of, concerning, as regards, upon
ymwarandaw (vn): listen
yn: (prep) in, into; introduces indef. pred.; forms perophrastic primary tenses; w. adj. forming adv.
yny (conj.): until, so that

Next, the reader will find the text with interlinear translation based on the glossary. This is what the reader will end with without using a published translation.

Meanwhile they they had heard news about
"E mysc hynny wynt a glywssont chwedlydaeth y wrth

and of her punishment This is what did
Riannon ac am y phoen. Sef a wnaeth Teirnon Twryf Uliant,

because of the find** he had made listen to the report and
o achaws y douot a gawssei, ymwarandaw am y chwedyl ac

ask in * about it until he heard from many of
amouyn yn lut ymdanaw, yny gigleu gan lawer o

people who came to his court increase complaint how pitiful
luossogrwyd o'r a delei y'r llys mynychu cwynaw truanet

misfortune and her punishment
damwein Riannon a'y phoen" (Thomson 20).

From this point in the traditional method, whatever dots need to be connected will have to be done by referring to a grammar manual. This is where a published translation (or better yet, a number of them) becomes the syntactic dictionary so important to the process. For the previous passage in *Pwyll*, four separate, standardly accepted translations of this passage follow:

1.
"And while these things were going forward, they heard tidings of Rhiannon and her punishment. And Teirnyon Twryv Vliant, by reason of the pity that he felt on hearing this story of Rhiannon and her punishment, inquired closely* concerning it, until he had heard from many of those who came to his court" (Guest 13).

2.
"Meanwhile, they heard tidings of Rhiannon and her penance. Teyrnon Twryf Liant, because of the find** he had made, gave ear to the tidings and inquired continually* concerning them, until from many of the throng who came to the court he heard ever-renewed complaint of Rhiannon's so sad lot and punishment" (Jones 18).

3.
"Meanwhile, they heard the news of Rhiannon and her punishment, and because of the find he had made, Teirnon listened to all the tales and made constant* inquiries, so that he heard from those who came from Arberth numerous laments over Rhiannon's misfortune and disgrace" (Gantz 63).

4.
"In the meantime, they had heard rumors about Rhiannon and her punishment. Because of the treasure** he had found, Teyrnon listened to the report and inquired earnestly* about it, until he heard from many of those multitudes that came to the court increasing complaints of the wretchedness of Rhiannon's state, and her punishment" (Ford 53-54).

* translation of *lut (llut)*

**The 'treasure' or 'find' referred to is Pwyll and Rhiannon's son, who will be named Pryderi upon his return to them. He had been stolen in the night by the claw of a mysterious being that had also been stealing Teyrnon's horses. Teyrnon waited for the being one night, severing its claw as it tried to steal a horse. The child then appeared at Teyrnon's doorstep. He and his wife raised the child as their own. Many years later, when he heard that Rhiannon had been unjustly accused of killing her child and was still doing penance, he knew the child to be the same one that had been abducted and later found by him.

After reading these published translations, it should be much easier to connect the dots in the interlinear 'glossary-only' translation. This being the case, even a reader completely unfamiliar with Middle Welsh would quickly discover the relevance of using published translations. Furthermore, if the translation of this very short text passage has been made easier by the use of these syntactic references, it should be clear how enabling the use of published translations can be in working with texts consisting of hundreds or thousands of lines.

This strategy produces additional important benefits. Consulting the grammar guide after working with a text and becoming familiar with aspects of the language will inevitably lead to the confirmation of one's own discoveries and conjecture. This introduces a very significant advantage to using published translations: the development of critical ability in the target language. The student is now required to evaluate the information based on dictionaries, glossaries, the published translations and his or her own knowledge and intuition (this is especially true of poetry). The process becomes completely internalized, and insight, speculation, conviction and sometimes even skepticism, fuel an interest to delve even deeper into aspects of the language that might have gone unnoticed without the ability to incorporate new perspectives.

Also, when using different translations, they are exactly that: different translations. The following reflects this very well.

> " 'Arglwyd,' heb y wreic wrth Teirnon, ' mae yr ebawl a differeist ti y noss y keueist y mab?' 'Mi a'e gorchymynneis y weisson y meirych,' heb ef, ' ac a ercheis synnyaw wrthaw.' 'Ponyt oed da i ti, arglwyd,' heb hi, ' peri y hywedu, a'y rodi y'r mab? Kany y yn erbyn hynny,' heb y Teirnon. 'Mi a adaf y ti y rodi idaw.' *'Arglwyd,' heb hi, 'Duw a dalo yt; mi a'e rodaf idaw'*"* (Thomson 20).

1.
> " 'My lord,' said his wife unto Teirnyon, 'where is the colt which thou didst save on the night that thou didst find the boy?' 'I have commanded the grooms of the horses,' said he, 'that they take care of him.' 'Would it not be well, lord,' said she, 'if thou wert to cause him to be broken in, and given to the boy, seeing that on the same night that thou didst find the boy, the colt was foaled and thou didst save him?' 'I will not oppose thee in this matter,' said Teirynon. 'I will allow thee to give him the colt. *'Lord,' said she, 'may Heaven reward thee; I will give it him'** So the horse was given to the boy" (Guest 13).

2.
> "'Lord,' said his wife to Teyrnon, 'where is the colt thou didst save the night thou Didst find the boy?' 'I have made him over to the grooms of the horses,' said he, 'and charged that he be looked after.' 'Would it not be well, lord,' said she, 'for thee to have him broken in and given to the boy? For the night thou didst find the boy the colt was cast and thou didst save him.' 'I will not go against that,' said Teyrnon; 'I will permit thee to give it him.' *'Lord,' said she, 'God repay thee. I will give it him.'* * The horse was given to the boy..." (Jones 18).

3.
> "'Lord,' said Teirnon's wife, 'where is the colt you rescued on the night you found the boy?' "I gave it into the care of the stableboys,' answered Teirnon, 'and ordered it to be looked after.' 'Would it not be a good idea to have it broken in and given to the boy? After all, you found the lad on the same night that the colt was born and rescued.' 'I will not argue against that—I will let you give it to him.' *'God reward you, lord, I will do that.'** So the horse was given to the lad..." (Gantz 62).

4.
> "'Lord,' said his wife to Teyrnon, 'where is the colt you rescued the night you found the boy?'
> 'I have entrusted it to the stable-boys,' he replied, 'and ordered them to look after it.'
> 'Wouldn't it be good for you, Lord,' she said, 'to have it broken in and given to the boy?
> For it was the night you found the boy that the colt that you rescued was born.'
> 'I will not oppose that,' said Teyrnon. 'I will let you give it to him.'*
> The horse was given to the boy..." (Ford 53).

* last passage before the passage in which the horse is given to the boy

In the original text and all but one of the translations of another passage, Teirnon's wife thanked him for allowing the horse to be given to the boy. One of the translators, Patrick Ford, decided it should be left out. Did Ford use a manuscript in which this passage wasn't found? Did he find it somehow irrelevant? Here we find a spark for the questioning process so crucial to research, which wouldn't have occurred just by looking at the original text and traditional translation aids.

When I began to learn Old English, not using a published translation presented me with a unique frustration. I was informed that fluency in German would lead to far greater accessibility to Old English with regard to both grammar and etymology. However, through my study of Middle Welsh—and to a lesser degree, through my knowledge of other languages and their word-stocks—I had learned to abstain, for the most part, from assuming cognates (a habit which ultimately led to my frustration with Old English). I was thoroughly conflicted, looking for cognates that I was told exist in great number, while simultaneously doubting their validity. Given these conflicting predispositions, I turned to a German translation of *Beowulf*. The following indicates in italics the number of similarities I was able to find between Old English and German.

Old English:
"*ða wæs on morgen mine* gefræge
ymb *þa gifhealle* guðrinc monig;
ferdon folctogan *feorran ond nean*
geond *widwegas wundor sceawian*" (eir.library.utoronto.ca, ll. 837-840).

German:
"*Da war am morgen*, wie *mir* gemeldet ward,
manch Gerkämpfer vor *der Giebelhalle*.
Die Fürsten kamen von *fern und nah*,
weite Wege, das *Wunder zu schaun*" (*Beowulf* 36).

* italics indicate relatively easily identified cognates

Certain idiosyncrasies in each language make things even trickier for the beginner. Welsh is subject to a number of possible mutations of initial consonants depending on various grammatical constructions. This means that an initial *p* can be a *b*, an initial *c* or *k* a *g*, an initial *t* a *d*, or one of 15 further mutations that occur in Welsh. So, *pali*, which means 'brocaded silk' is frequently found as *bali*, but it will only appear in a glossary under *p* in its unmutated form. When looking words up in glossaries or dictionaries then, it's necessary to know the type of mutation to look for (there are three types: soft, aspirate and nasal) and what letter to expect with the given mutation type. These mutations and their causes become recognizable with practice. Sometimes though, a translation and reverse dictionary search seems to be the only way of preventing frustration or even of identifying a term at all.

In Old English, verbs can occur with or without an initial *ge-*. With a few exceptions, this has no bearing on definition. (Here, the German speaker takes a while to adjust, because an initial *ge-* in German almost always indicates present perfect tense). Hence, both *standan* and *gestandan* can mean 'to stand.' This prefix also occurs with nouns, which can lead to *ge-* nouns being confused with *ge-* verbs. With regard to verbs, both Welsh and Old English also present a disadvantage to the learner in that verb conjugations can often be difficult to associate with their infinitives or standard verb-noun forms.

Beyond being more progressive, the use of published translations in learning a language through literature also seems to be more effective, at least in my experience. It enables steadier, more stable access to anyone with the interest and ability to learn a language this way, and it also offers chances at greater initial success. This increases the motivation to continue on toward a fluency in which the published translation may eventually become superfluous.

In this age of information excess and attention deficit, students simply can no longer relate to older methods of learning. It no longer seems reasonable to expect traditional language learning methods of translation and rote memorization to provide the success that they once did. This is especially true with old languages, if their study has any hope of continuing with new generations of students.

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LOVE AND POWER

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The balance between love and power is a theme that appears frequently in French theatre. In two plays of different styles and objectives, *Le Cid* by Corneille and *Phèdre* by Racine, one can recognize that this balance, or more appropriately, imbalance, is a motif treated consciously by their creators. This problem of power is born of division, and exists in several domains: patriarchy, gender, politics, and speech. In order to study the effects of these aspects of power and its function in love, it is necessary to discover how they create division, and to analyze the consequences of this rupture.

In *Le Cid* by Corneille, patriarchal power and its role in the play is omnipresent at the structural level, and it is essential for the flow of the play. There are no mothers, therefore the source of identity comes from the fathers (Carlin, 53). This identity is quite different for the two lovers and creates power and powerlessness at the same time. The origin of the conflict between Chimène and Rodrigue, and the cause of their problem of power, is this patriarchal system which determines who can participate and who cannot.

At the beginning of the play, there is no doubt that Chimène and Rodrigue love each other, but at the moment of the rivalry between their fathers, their love becomes impossible to realize. Rodrigue's decision to avenge his father by killing Chimène's is a critical moment, and he could never have become a hero had he not made this decision. He fulfills his duty as a son even though it makes him lose his love, and he preserves his honor in preserving the honor of his father. However, all of Rodrigue's successes are Chimène's failures (Carlin, 35). «Chacun peut la vanter avec quelque justice, / Mais pour moi sa louange est un nouveau supplice » (4.2.1[1]). "All can sing his praises with justice, / But for me his praise is a new torture."[2] She is divided between her love for Rodrigue and the respect she has for her father, but she realizes that she is the only one who can avenge him[3], which *is* for her an heroic moment. «Je cours sans balancer où mon honneur m'oblige, [4]/ Rodrigue m'est bien cher, son intéret m'afflige/ Mon coeur prend son parti; mais, malgré son effort Je sais ce que je suis, et que mon père est mort » (III iii, 821). "I go unsure to whom I am obliged by honor, / Rodrigue is quite dear to me, his interest grieves me / My heart takes his side; but despite its effort / I know what I am, and that my father is dead" (my translation). According to Georges Poulet, it's exactly this moment that creates the hero. « Ce qui distingue le héros cornélien, c'est l'identification instantanée de l'être et vouloir » ; "What distinguishes the Cornelian hero is the instantaneous identification of being and wanting" (my translation). However, there are two reasons for which it is impossible for Chimène to become a hero despite her spirit; her heroism is not recognized in the patriarchal system, [5]and her wanting is corrupted by the division of her feelings for Rodrigue, as well as by her duty to her father.

Rodrigue is capable of fulfilling his duty, but Chimène remains powerless. «Tu n'as fait le devoir que d'un homme de bien / Mais aussi, le faisant, tu m'as appris le mien » (III iv, 899). "You have only done the duty of an honorable man / But also, by doing it, you have taught me mine" (my translation). She knows what she must do, but Rodrigue insists that if he must die, he must die by her hand, an impossibility for Chimène. She could never take up the sword against him. « Chimène ne peut donc que s'inspirer du modèle d'honneur masculin. (. . .) elle est incapable d'imiter le duel de Rodrigue » (Albanese, 553). "Chimène can therefore only be inspired by the model of masculine honor. (. . .) [S]he is incapable of imitating Rodrigue's duel."(my translation). Further, she cannot support the idea of killing her lover, and for her love, she wishes not to have the means to do what she must. «Mais, malgré la rigueur d'un si cruel devoir, / Mon unique souhait est de ne rien pouvoir ». "Yet, despite the severity of such a cruel duty, / My only wish is to be able to do nothing" (my translation). She is left without means to avenge herself and she is unable to renounce her love for Rodrigue.

When Rodrigue becomes Le Cid, all is lost for Chimène. She cannot love her father's murderer, and she cannot kill the savior of the society. She is silenced, and the king, patriarch of the society, pronounces Chimène's new duty to marry Rodrigue, one she tries to refuse to continue her struggle for justice. "But patriarchy, in the form of political absolutism intervenes: the possibility of sacrifice is taken away from Chimène by the King's decree that they will marry, and fathers and sons can take their place in the hierarchy, untouched by her daring gesture" (Carlin, 14). Her powerlessness is signified by her frustration and her silence.

Speech plays a role as interesting as patriarchy, and above all, in its function as performative. For Rodrigue, speech is a means to invoke power. «[S]on discours mène de la sorte à l'action » (Albanese, 552). "His discourse leads in that way to action"(my translation). From the beginning, language for him creates initiative; he remains immobile until the moment he pronounces his intentions. «Courons à la vengeance » (I vi, 436), "Let us run to vengeance" (my translation). With the count, « il s'engage dans un duel discursif qui annonce le duel physique » (Albanese, 552). "He engages in a discursive duel which announces the physical duel" (my translation). After he disarms through language, he disarms through action by imposing his will. His words are powerful.

Rodrigue uses his verbal weapons to become Le Cid as well. With his strategy of a «silence calculé, destiné à tromper l'ennemi» (Albanese, 556), a "calculated silence, destined to fool the enemy" (my translation), he vanquishes the Moors. For Rodrigue, silence creates deception, and his speech transforms him into a hero. «Dans le cas de Rodrigue, la construction de l'identité héroïque procède de son plein engagement dans le discours » (Albanese, 560). "In Rodrigue's case, the construction of heroic identity proceeds from his full engagement in discourse" (my translation)[6]. The voice for Rodrigue is an instrument, a tool, and a weapon: there is no division between speaking and doing.

On the other hand, the relationship between speech and power functions differently for Chimène. She has the same passions as Rodrigue for love, honor, and duty, but she is limited and is incapable of expressing them. The performative has no force as, «on assiste à la déconstruction de l'identité héroique par le biais du discours. Le décalage entre logos et praxis provoquant, chez elle, une humiliation profonde, Chimène est exclue des valeurs héroiques » (Albanese, 560). "[O]ne attends the deconstruction of the heroic identity by the device of discourse" (my translation). She is limited by language because she is not listened to.

From the beginning, Chimène is silenced. She does not have the right to name her choice of husband, and further, her confidante assures her father that she silently awaits his word. After the death of her father, she wants to do as Rodrigue has done, to avenge her father and to keep her honor. In this system, she is incapable of doing this because her words have no power; the performative does not work for her. Immediately after the duel she cries, "Sire, sire, justice! (. . .) I demand justice." (my translation). The king, Don Fernand, responds with a promise for justice, but it is effectively a lie because her demand is not seriously considered by others, especially after Rodrigue finds his glory.

Even without support, Chimène refuses to abandon her desire for vengeance, and she hides her lasting love for Rodrigue. At the same time, when he becomes Le Cid, the king no longer hears her cries for justice, and gives her false news of his death. This lie creates confusion; her reaction counters her desire for justice. There is a disaccord between her corporal and verbal speech. Her public admission is misunderstood as a renunciation of her vengeance. Don Fernand sees that she becomes pale with the news, which indicates to him that she loves Rodrigue and therefore could not really desire his death. Even when she tries to say that she still insists upon justice, he does not listen because he believes what he sees, not what she says. She knows that all is lost. «Là, sous votre pouvoir, tout lui devient permis; / il triomphe de moi comme des ennemis » (IVv, 1395). "Here, under your power, all for him becomes permitted; / he triumphs over me like his enemies" (my translation). Her powerlessness angers her, and the ineffectiveness of her words is disheartening. «De ma juste poursuite on fait si peu de cas / Qu'on me croit obliger en ne m'écoutant pas! / Puisque vous refuser la justice à mes larmes » (IV v, 1379). "Of my just pursuit one makes such a small case / That you believe you're obliging me by not listening to me! / Seeing that you refuse justice to my tears" (my translation). All of her means of communication, her tears, her pleas, and even her fainting are essential to Chimène, but no one wants to listen to her. For her, communication is blocked.

The imposition of silence upon Chimène suggests that her words are not completely powerless. She asks of Rodrigue to "impose my silence"(V I, 1554) (my translation), because she knows that her words want to produce his death which would end their love. Her vendetta creates imbalance between her and her lover, for the patriarchy, and for the entire society. She is dangerous because she refuses silence: « le mutisme de Chimène apparaît comme une nécessité politique; bref, il s'agit d'une conquête politique et sentimentale qui assurera à Rodrigue son invulnerabilité » (Albanese, 556); "the silencing of Chimène appears to be a political necessity; in short, it's about a political and sentimental conquest which will assure Rodrigue his invulnerability" (my translation). Thus, Chimène is sacrificed to protect the hero. The king orders their

marriage in order to resolve conflict and to reestablish peace. It's[7] he, father of all, who is the last to speak. He tells her to wait if she wishes, but she must cease her pleas and marry the hero. Chimène remains silent after this order, but it is not clear if she marries Rodrigue or not. Corneille himself says, «elle ne se tait qu'apres que le Roi l'a différée, et lui a laissé lieu d'espérer qu'avec le temps il y pourra survenir quelque obstacle. Je sais bien que le silence pass d'ordinaire pour une marque de consentement, mais quand le Rois parlent, c'en est une de contradiction» (Carlin, 95); "she only quiets herself after the king defers (verb ?) her, and left her room to hope that with time some obstacle might arise." I know well[8] that silence ordinarily passes for a sign of consent, but when Kings speak, it is one of contradiction" (my translation). For Chimène, her silence is perhaps a final resistance.

The complications of love and power manifest themselves in a delicate manner; the same social system creates situations and problems that afflict Rodrigue and Chimène in different ways. Rodrigue is capable of success in this system because he is permitted to take action, and he is finally well compensated. On the other hand, Chimène is not recognized in the same way. She accepts all the same values and she tries to follow the same codes, but at every turn, she is refused. It is evident that in such a society there are some who can attain power in searching out their glory, and others who are excluded and who must lose so that others might win. In the end, it's this power game which renders happy love impossible.

In *Phèdre* by Racine, a difficulty of power also functions in love. There are still the political and patriarchal problems, but the conflict of love and power comes principally from a reversal of gender attributes- from a reversal of that which is associated with masculine and feminine. This role reversal creates structural problems which touch nearly every aspect of the play, and is the source of tragedy. «Changer toutes choses en leur contraire est à la fois la formule du pouvoir divin et la recette même de la tragédie » (Barthes, 50); "To change all things to their opposite is at the same time the formula of divine power and the very recipe of tragedy" (my translation). Phèdre is masculinized, while Hippolyte, the target of her love, is feminized. Given this reversal, it is evident that the dynamics of power and love will function differently in *Phèdre* than in *Le Cid.* In Phèdre, the division between power and love is created by a force which is violent, supernatural, and inevitably tragic. As Cloonan points out, "In Racinian society death, madness or isolation is the punishment for love" (29). No one escapes.

In *Phèdre,* there are two sorts of love, the two forms of Eros. The love between Hippolyte and Aricie is a tender, innocent love. They have loved each other since childhood, and it is lasting. The other love, that which Phèdre has for Hippolyte, is brutal and violent, and could never succeed (Barthes, 22). The first is a state of equilibrium, the other is desperate, blind, and dangerous. What is even more shameful is that Phèdre is a powerless victim of her own emotions, but she is convinced she can continue to dominate them. Cursed by Venus, Phèdre refuses to accept the power her love has over her (Cloonan [9]115).

In Racine, love is a political force that defies social ideals. This idea of political power plays an important role in the play. «Il ne s'agit nullement d'un conflit d'amour, celui qui peut opposer deux êtres dont l'un aime et l'autre n'aime pas. Le rapport essentiel est un rapport d'autorité, l'amour ne sert qu'a le *révéler* » (Barthes 34). "It's not at all about a conflict of love, one which opposes two beings among whom one loves and the other doesn't love. The essential relationship is a relationship of authority, love only serves to *reveal* it" (my translation). Phèdre has total power over Hippolyte, and during Thésée's absence, it is she who takes the place of the patriarch. "Phèdre employs all the power and dignity she possesses in the state as a means of tempting the prince" (Cloonan 119). She hopes that her new power can win his heart. On the other hand, Hippolyte is not a figure who symbolizes power; he is a virgin, and he lacks the qualities of a virile man. He is not like his father who dominates others, especially women. For Hippolyte, physical love is something that corrupts. «L'amour pour lui est une souillure, la femme est l'ennemie» (Dédéyan, 49) ; "Love for him is that which soils, woman is the enemy." He does not dominant, he is dominated.

However, neither Phèdre nor Hippolyte are masters of their destiny. At first, Phèdre is the victim of a hereditary punishment. The malediction inflicted by Venus creates a chain of power and domination which only ends with tragedy. No one has power over her/himself, and each tries to repair this by exerting force over others: Venus on Phèdre, Phèdre on Hippolyte. Phèdre recognizes that the goddess is responsible for her affliction. She is afraid of the intensity of her emotions, but she has no means of resisting them.

Beyond this chain of power is Thésée. Charles Dédéyan suggests that it is Thésée who is at the center as it pertains to action. The power of his absence and of his presence is at the heart of the action, and provokes the acts of the lovers (Dédéyan[10] 119). Thésée maintained the stability but, «...lorsque le Père manqué (provisoirement), tout se défait; lorsqu'il revient, tout s'aliène: l'absence du Père constitue le désordre; le retour du Père institue la faute» (Barthes, 48); "when the Father is missing (for the time being), everything comes undone; when he returns, everything crumbles: the absence of the Father constitutes disorder; the return of the Father institutes the mistake" (my translation). The tragedy would have never begun if he had never left, or even if he had never come back.

During his absence, Phèdre is desperate. She wants to kill herself in order to purify herself of such a monstrous love. «Je voulais en mourant prendre soin de ma gloire / Et dérober au jour une flame si noire.» (I iii, 309). "In dying I wanted to attain my glory/ And to unmask to the day a flame so black" (my translation). She believes herself to be guilty and no longer wants to suffer an impossible love. But, with the false news of Thésée's death, Phèdre allows herself to «se laisse rattacher à la vie» (Dédéyan, 119), to "let herself reattach to life" (my translation). And, in following the advice of Oenone, she confesses her love. At the same time, Hippolyte is no longer forced to avoid Aricie, and he offers her all he has. All difficulty arrives with Thésée's return. Phèdre wishes again for death, and Hippolyte has already taken actions which will lead to his. The return is the catalyst for tragedy, because each had spoken when each should have remained silent.

Phèdre's speech is powerful and dangerous because «La conduite du héros racinien est essentiellement verbale» (Barthes 116). "The conduct of the Racinian hero is essentially verbal" (my translation). Phèdre knows she is guilty of a monstrous love, but it is more problematic to speak than to remain silent. «Phèdre est son silence même: dénouer ce silence, c'est mourir, mais aussi mourir ne peut être qu'avoir parler» (Barthes, 116). "Phèdre is her silence: to undo this silence is to die, but also, to die is perhaps only to have spoken" (my translation). She speaks three times when she should have remained silent. The first is her practically forced confession to Oenone. The second is her confession to Hippolyte when she explains her wrath. «Pour mieux te résister, j'ai recherché ta haine/ De quoi m'ont profité mes inutiles soins?/ Tu me haissais plus, je ne t'aimais pas moins;/ Tes malheurs te prêtaient encor de nouveaux charmes; J'ai langui, j'ai seché dans les feux, dans les larmes»; "To better resist you I searched out your hate/ How did I profit from my useless cares?/ You hated me more, I loved you no less/ Your misfortunes gave you even more new charms/ I languished, I dried up in fires, in tears" (my translation). She shows him an image of love with an intensity that he doesn't understand, he has never burned in such a way. The third moment Phèdre breaks her silence is with Thésée. When the tragedy is complete, she tells him, «C'est moi qui, sur ce fils chaste et respectueux,/ Osai jeter un oiel profane, incestueux»; "It's me who, on this chaste and respectful son/ Dared to lay a profane, incestuous eye" (my translation). Roland Barthes explains the force of the word: «Qu'est-ce donc qui fait la Parole si terrible? C'est d'abord qu'elle est un acte, le mot est puissant. Mais surtout c'est qu'elle est irreversible: nulle parole ne peut se reprendre: livré au Logos, le temps ne peut se remonter, sa création est définitive» (Barthes, 119). "So what makes speech so terrible? First of all, it is an act, the word is powerful. But most of all, it's that it is irreversible: no speech can be taken back: delivered from Logos, time cannot turn back, its creation is definitive" (my translation).

But Phèdre's silence is also dangerous, and it proves the true power she has over Hippolyte. It's when she remains silent, and she permits Oenone to accuse him of her own crime, that Hippolyte becomes her victim. Her silence is born of jealousy, and it's more criminal than her speech. She knows she could save him, but she prefers his death because he loves another. But it is Hippolyte with his final silence which leads him to his destiny. He hides the truth to protect his father's honor. «Devais-je, en lui faisant un récit trop sincère,/ D'une indigne rougeur couvrir le front d'un père?»; "Should I, in telling him a tale too sincere/ an unworthy shame cover the face of a father?" (my translation). Aricie can also save her lover, but Hippolyte asks her to remain silent as well. She says, «J'imite sa pudeur, et fuis votre présence/ Pour n'être point forcée à rompre le silence»; "I imitate his prudence, and flee your presence/ In order to not be forced to break the silence" (my translation). It is only with the tragedy complete that Phèdre breaks the silence while dying. With her final words she explains all and, as with her words, her actions cannot be taken back. All is done.

In the two plays, *Le Cid* and *Phèdre*, it is clear that the dynamics between love and power are the source of dramatic action. There are several domains of power, and these domains are always in the process of

integrating and influencing one another. The result is a network, a system that creates drama. There is no character who escapes, nor any situation that doesn't participate in the game.

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IV. Linguistics

WHY DO CHILDREN SAY *DID YOU WENT*?[1]

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ABSTRACT

This study evaluates three hypotheses concerning the L1 acquisition phenomenon of "doubling errors": the SAI hypothesis, the movement hypothesis, and the *do*-insertion hypothesis. Through the examination of the occurrence of doubling errors in *yes/no* questions and negative declaratives, it is found that doubling errors occur far more frequently in *do*-contexts than in non-*do*-contexts. This asymmetry between the frequency of doubling errors in *do*-contexts and those in non-*do*-contexts is accounted for by the involvement of *do*-insertion (the *do*-insertion hypothesis), not by an un-adult-like question formation rule (the SAI hypothesis) nor by an un-adult-like movement rule (the movement hypothesis). It is argued that the underlying factor in doubling errors is the demands of *do*-insertion itself. This is presumably because *do*-insertion is a costly language-specific process and is a cross-linguistically marked process. Cross-linguistic evidence and theoretical support for the claim that *do*-insertion is marked are provided in this paper.

1.0. INTRODUCTION.

This study elucidates the reasons for the occurrence of doubling errors, a type of speech error observed in young English-speaking children, by analyzing data in CHILDES (Child Language Data Exchange System) (MacWhinney 2000). While tense and agreement are expressed only once in a grammatical sentence, in a doubling error, "tense and/or agreement is incorrectly expressed twice - once on the 'fronted' auxiliary and once on the main verb" (O'Grady 1997: 166) as illustrated in (1) and (2) below:

(1) **What's that is?* (*Is* is expressed twice)
(2) **What did you bought?* (Both of *did* and *bought* carry past tense)

(Children aged 1;10-2;6 in Hurford 1975)

In grammatical sentences, either auxiliary verbs or main verbs may carry tense and agreement. Doubling errors can be observed in environments which require both an auxiliary verb and a main verb. Therefore, *yes/no* questions, *wh*-questions, and negative sentences in current Standard English are the environments to look for doubling errors.

Doubling errors in young English-speaking children's question structures were examined by Stromswold (1990). She reported a frequency of doubling errors of 0.4 % in question structures involving a Subject Auxiliary Inversion (SAI). Current Standard English is a Subject Auxiliary Inversion language that inverts the subject and its auxiliary as a way to distinguish between statements and questions.[2]

Subject Auxiliary Inversion involves movement: moving the auxiliary into a pre-subject position. Chomsky (1965, 1993) proposes that there are two operations in movement. The first involves copying the target element (the auxiliary verb in the case of inversion) into a surface structure position. The second operation then deletes it from the original deep structure position. This mechanism is shown in (3).[3]

(3) Inversion via copying and deletion:
Deep structure: they will go
After copying: will they will go
After deletion: will they ∅ go (O'Grady 1997: 164)

Previous studies have looked at two possible explanations for doubling errors: SAI and movement. Hurford (1975) attributes doubling errors to the child's version of the Subject Auxiliary Inversion rule. This rule says that tense is copied to the target position without deletion of the original tense (this is different from the adult version of Subject Auxiliary Inversion rule (cf. 3)). Hurford considers doubling errors not as errors but as patterns that are licensed by the child's grammar, and predicts doubling errors to occur in any sort of Subject Auxiliary Inversion environment, but not other environments where SAI is not involved. I will refer to this as "the SAI hypothesis".

On the other hand, Mayer et al. (1978) claim that children incorrectly formulate some movement transformations as copying without deletion, and explained doubling errors as the result of this un-adult-like transformation. While considering doubling errors as licensed by the child's grammar, Mayer et al. predict doubling errors to occur not only in environments involving SAI but also in other environments involving any sort of movement formulated as copying without deletion. I will refer to this as "the movement hypothesis."

While both of these hypotheses helped identify general environments where doubling errors occur, this paper will show that both the SAI hypothesis and the movement hypothesis are insufficient to accurately account for the distribution of doubling errors. Instead, I propose that the main factor underlying doubling errors is the need for *do*-insertion. I will refer to this as "the *do*-insertion hypothesis." The details of the *do*-insertion hypothesis, the SAI hypothesis, and the movement hypothesis are provided in Section 2. Section 3 describes the methodology of a corpus study to evaluate the three hypotheses. The result of this corpus study and the discussion are presented in Sections 4 and 5. Section 6 gives the conclusion.

2.0. THE *DO*-INSERTION HYPOTHESIS.

2.1. MARATSOS AND KUCZAJ (1978).

Doubling errors occur more frequently in *do-yes/no* questions than in other *yes/no* questions. Maratsos and Kuczaj (1978) reported that the frequency of occurrence of doubling errors is about 15% in questions that begin with *does* (*Does she eats it?*) and about 10% in questions that begin with *did* (*Did she went there?*). However, doubling errors are rarely found in questions beginning with *is* (*@Is she is eating?* [4]), *are* (*@Are you are eating?*), or with a modal (*@Can you can finish?*). Table 1 summarizes the results described by Maratsos and Kuczaj (1978).

TABLE 1. The doubling errors in various types of *yes/no* questions in two English-speaking children (D.C and K.R, ages not specified in Maratsos and Kuczaj (1978)).

Yes/no questions	D.C (%)	K.R (%)
***Does* NP V+s (*does* Q)**	**8/60 (13.3)**	**1/17 (5.9)**
***Did* NP IrV+pst (*did* Q)**	**7/40 (17.5)**	**5/32 (15.6)**
Repeated *is* Q	0/56 (0)	1/38 (2.6)
Repeated *are* Q	0/15 (0)	0/19 (0)
Repeated Modal Q	0/0 (0)	0/0 (0)

2.2. RE-INTERPRETING MARATSOS AND KUCZAJ (1978).

Because it is obvious from Table 1 that doubling errors occur more frequently in *yes/no* questions that begin with an inflected form of *do*, but rarely in *yes/no* questions that begin with an inflected form of *be* or modal, I classified these five categories of *yes/no* questions into three categories: *do-yes/no* questions (which begin with *do*), *be-yes/no* questions (which begin with *be*), and modal-*yes/no* questions (which begin with a modal). The reinterpreted results are shown in Table 2.

TABLE 2. The interpretation of the doubling errors reported by Maratsos and Kuczaj (1978) in my classification of *yes/no* questions.

Yes/no questions	D.C (%)	K.R (%)
***Do-yes/no* question**	**15/100 (15.0)**	**6/49 (12.2)**
Be-yes/no question	0/71 (0)	1/57 (1.8)
Modal-*yes/no* question	0/0 (0)	0/0 (0)

2.3. THREE YES/NO QUESTION TYPES.

Table 2 shows that doubling errors occur far more frequently in *do-yes/no* questions than in other *yes/no* questions. Under the assumption of Chomsky (1991), the crucial defining characteristic of *do-yes/no* questions is that they involve *do*-insertion, unlike other *yes/no* questions (see Table 3).

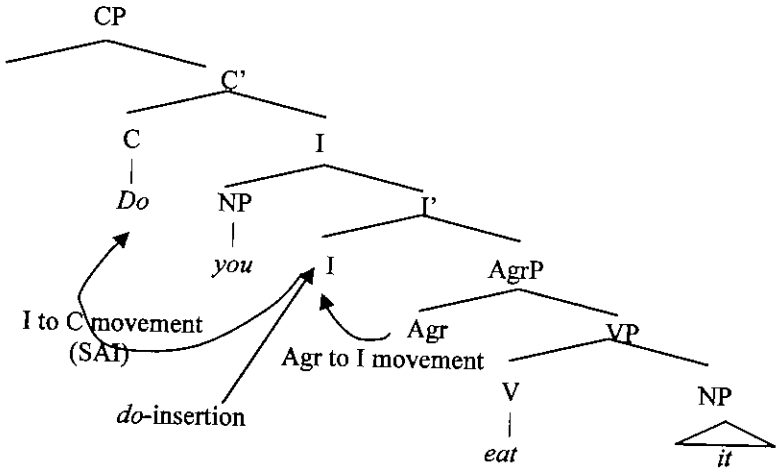
TABLE 3. The differences in the formation of *yes/no* questions.

Yes/No Question types	Examples	Formation of *yes/no* questions
Do-yes/no question	*Do you eat it?*	Agr to I, ***do*-insertion into I**, I to C shown in Figure 1.
Be-yes/no question	*Are you eating?*	V to Agr, Agr to I, I to C shown in Figure 2.
Modal-*yes/no* question	*Will you eat it?*	Agr to I, I to C shown in Figure 3.

2.3.1. *DO-YES/NO* QUESTIONS.

To create *do-yes/no* questions, abstract Agr is moved to the I position, and according to Chomsky (1991), *do* is inserted in the I position. Then, the inserted *do*, instead of the main verb *have*, is moved to the C position (in the process of SAI). This process is shown in Figure 1.

FIGURE 1. The derivation of *do-yes/no* questions in the framework of Chomsky (1991).

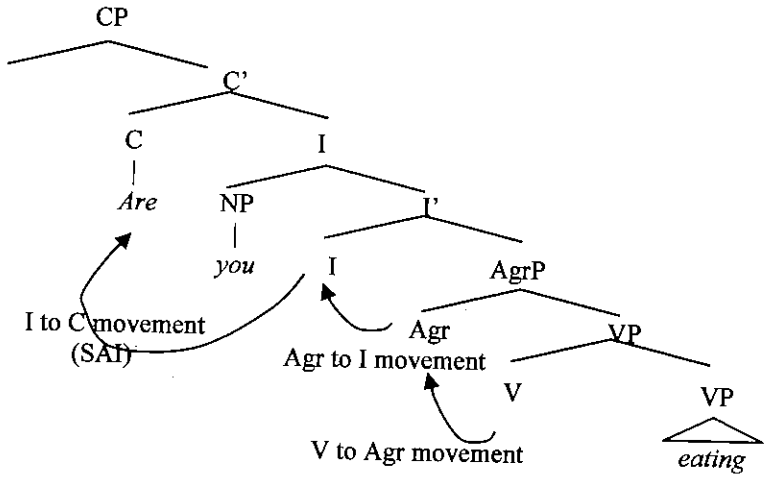


2.3.2. *BE-YES/NO* QUESTIONS.

On the other hand, the processes for creating *be-yes/no* questions and modal-*yes/no* questions do not involve any operation of inserting any additional elements, because the *be*-verb and the modal can themselves be inverted in Current Standard English.

The *be*-verb and the modal are moved to the left of the subject. The process for creating *be-yes/no* questions is shown in Figure 2. The *be*-verb is moved from the V position to the C position (through the Agr position and the I position).

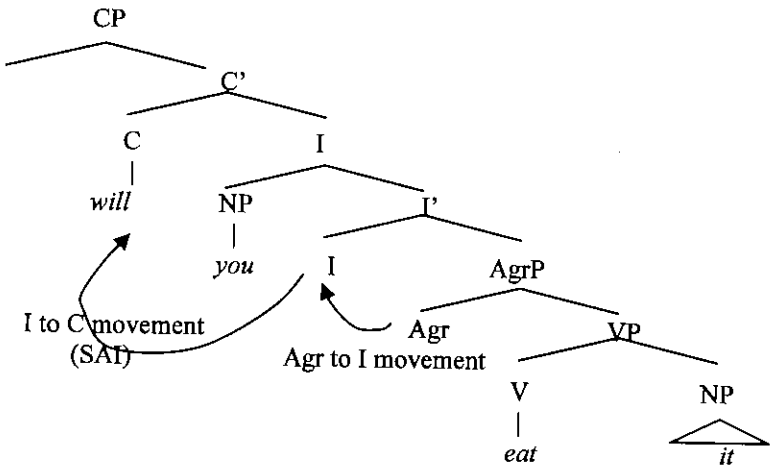
FIGURE 2. The derivation of *be-yes/no* questions in the framework of Chomsky (1991).



2.3.3. MODAL-*YES/NO* QUESTIONS.

The processes for creating modal-*yes/no* questions are shown in Figure 3. Abstract Agr is moved from the Agr position to the I position where, according to Chomsky (1991), the modal is base-generated. The Agr and modal are moved together to the C position in the process of SAI.

FIGURE 3. The derivation of modal-*yes/no* questions in the framework of Chomsky (1991).



In other words, there is a crucial difference among the three types of questions in their derivations: while *be-yes/no* questions and modal-*yes/no* questions do not involve any operation inserting an element, *do-yes/no* questions involve the operation of *do*-insertion. Based on this defining characteristic and the results in Table 2, it is natural to assume that the occurrence of doubling errors is related to *do*-insertion.

2.3.4. PREDICTIONS.

The contrast among the predictions of the three hypotheses is shown in Tables 4, 5 and 6, where shadowed boxes indicate cases in which high percentages of doubling errors are predicted by each hypothesis.

TABLE 4. The predicted doubling error environment in *yes/no* questions by the *do*-insertion hypothesis.

Yes/no question types	Examples	**the *do*-insertion hypothesis.**
Do	*Do you eat it?*	
Be	*Are you eating?*	
Modal	*Will you eat it?*	

TABLE 5. The predicted doubling error environment in *yes/no* questions by the SAI hypothesis.

Yes/no question types	Examples	**the SAI hypothesis**
Do	*Do you eat it?*	
Be	*Are you eating?*	
Modal	*Will you eat it?*	

TABLE 6. The predicted doubling error environment in *yes/no* questions by the movement hypothesis.

Yes/no question types	Examples	**the movement hypothesis**
Do	*Do you eat it?*	
Be	*Are you eating?*	
Modal	*Will you eat it?*	

Among the three hypotheses, only the prediction of the *do*-insertion hypothesis is consistent with my interpretation of Maratsos and Kuczaj's (1978) data shown in Table 2: doubling errors occur frequently only in *do-yes/no* questions. If this is the case, it is indicated that the cause is not just Subject Auxiliary Inversion or movement in general (which are involved in creating all three types of questions). Rather, it is *do*-insertion which is peculiar to the process of creating *do-yes/no* questions among the three types of *yes/no* questions.

However, using aggregated data from Maratsos and Kuczaj without access to the original data is not very convincing. Furthermore, the background information of the informants, such as ages or the dialect(s) of English involved, is not provided by Maratsos and Kuczaj. For the *do*-insertion hypothesis to be considered more convincing, the results from Maratsos and Kuczaj need to be confirmed with a well-recognized large pool of data such as the CHILDES data. Thus, one of the goals of this study is to examine a large pool of data, for which background information is available, to confirm this asymmetry found in Maratsos and Kuczaj's data.

2.4. THREE NEGATIVE DECLARATIVE TYPES.

The other goal of this study is to isolate the effect of *do*-insertion from SAI through examining the distribution of doubling errors in negative declaratives. *Do-yes/no* questions involve not only *do*-insertion but also SAI, while *do*-negative declaratives involve only *do*-insertion. Therefore, the examination of doubling errors in negative declaratives will allow us to gain new crucial evidence of the effect of *do*-insertion solely, factoring out the effect of SAI.

For this study, negative declaratives are classified into three types: *do*-negative declaratives (which have *do* to the left of the negative), *be*-negative declaratives (which have *be* to the left of the negative), and modal-negative declaratives (which have a modal to the left of the negative). Table 7 shows the derivation of the three types of negative declaratives. None of the three types of negative declaratives involves SAI, but all involve movement of an auxiliary to the I position. Only *do*-negative declaratives involve *do*-insertion.[5]

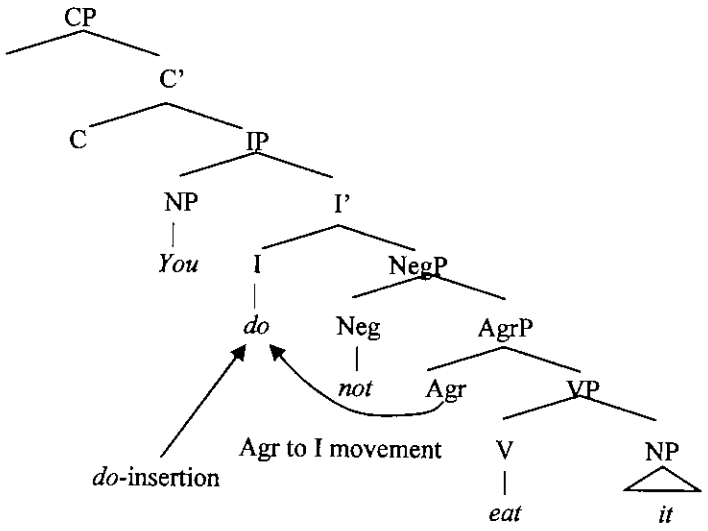
TABLE 7. The difference in the formation of negative declaratives.

Negative declarative types	Examples	Formation of negative declaratives
Do-negative declarative	*You do not eat it.*	Agr to I, ***do*-insertion into I** shown in Figure 4.
Be-negative declarative	*You are not eating.*	V to Agr, Agr to I shown in Figure 5.
Modal-negative declarative	*You will not eat it.*	Agr to I shown in Figure 6.

2.4.1. *DO*-NEGATIVE DECLARATIVES.

To create *do*-negative declaratives, Agr is moved to the I position, and *do* is inserted into the I position. This process is shown in Figure 4.

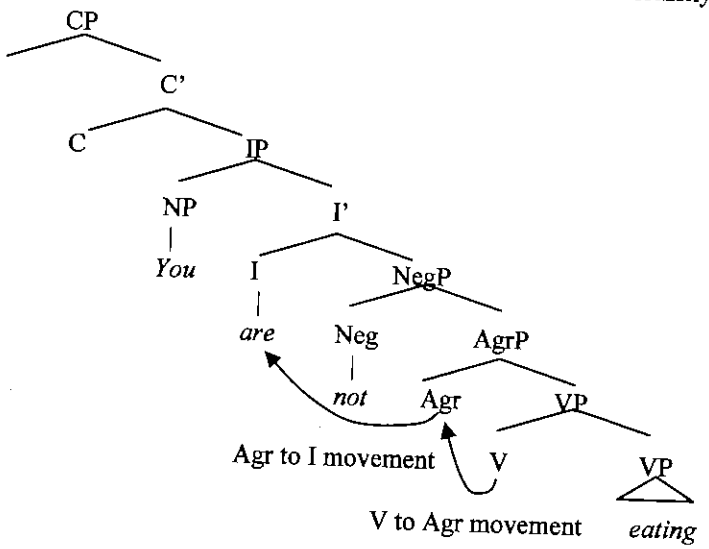
FIGURE 4. The derivation of *do*-negative declaratives in the framework of Chomsky (1991).



2.4.2. *BE*-NEGATIVE DECLARATIVES.

In contrast, the formation of *be*-negative declaratives and modal negative declaratives does not involve any insertion operation. To create *be*- 'negative declaratives, the *be*-verb is moved from the V position to the I position via the Agr position. This is shown in Figure 5.

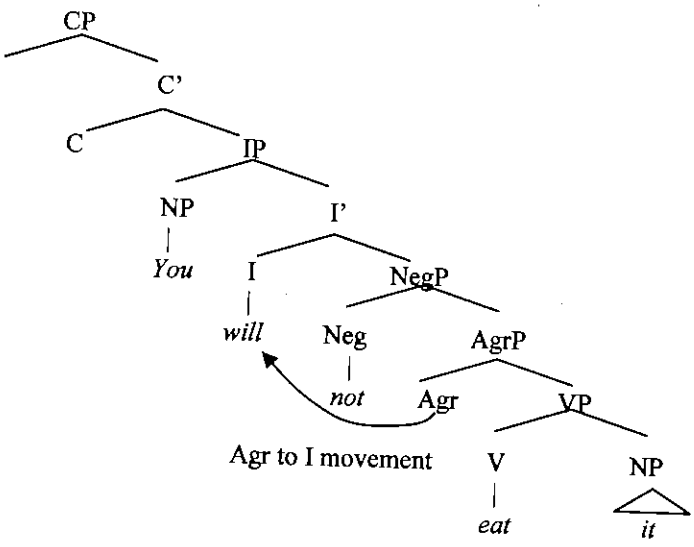
FIGURE 5. The derivation of *be*-negative declaratives in the framework of Chomsky (1991).



2.4.3. MODAL-NEGATIVE DECLARATIVES.

To create modal-negative declaratives, abstract Agr is moved from the Agr position to the I position. However, the modal is base-generated in the I position. This is shown in Figure 6.

FIGURE 6. The derivation of modal-negative declaratives in the framework of Chomsky (1991).



2.4.4. PREDICTIONS.

As shown above, none of the three types of negative declaratives involve SAI. Among the three types of negative declaratives, only *be*-negative declaratives involve movement of a verbal element (*be* is moved from the V position to the I position) and only *do*-negative declaratives involve the insertion of an element (*do*-insertion). This allows for clear distinctions in the predictions for each hypothesis: the *do*-insertion hypothesis

predicts doubling errors only in *do*-negative declaratives, the SAI hypothesis predicts doubling errors in none of the three types of negative declaratives, and the movement hypothesis predicts doubling errors only in *be*-negative declaratives. The contrast among the predictions of the three hypotheses with respect to negative declaratives is shown in Tables 8, 9 and 10, where shadowed boxes indicate cases in which doubling errors are predicted by each hypothesis.

TABLE 8. The predicted doubling error environment in negative declaratives by the *do*-insertion hypothesis.

Negative declarative types	Examples	**the *do*-insertion hypothesis**
Do	*You do not eat it.*	
Be	*You are not eating.*	
Modal	*You will not eat it.*	

TABLE 9. The predicted doubling error environment in negative declaratives by the SAI hypothesis.

Negative declarative types	Examples	**the SAI hypothesis**
Do	*You do not eat it.*	
Be	*You are not eating.*	
Modal	*You will not eat it.*	

TABLE 10. The predicted doubling error environment in negative declaratives by the movement hypothesis.

Negative declarative types	Examples	**the movement hypothesis**
Do	*You do not eat it.*	
Be	*You are not eating.*	
Modal	*You will not eat it.*	

2.5. SUMMARY OF PREDICTIONS.

In sum, SAI is involved in all *yes/no* questions, but not in any negative declaratives. Movement of the verbal element is involved in all *yes/no* questions and *be*-negative declaratives. The involvement of *do*-insertion is restricted to *do-yes/no* questions and *do*-negative declaratives. That is, the SAI hypothesis predicts doubling errors in all *yes/no* questions, but not in any negative declaratives. The movement hypothesis predicts doubling errors in all *yes/no* questions and *be*-negative declaratives. The *do*-insertion hypothesis predicts doubling errors only in *do-yes/no* questions and *do*-negative declaratives. These predictions are summarized in Tables 11, 12, and 13. Shadowed boxes indicate cases in which high percentages of doubling errors are predicted by each hypothesis.

TABLE 11. The predicted doubling error environment by the *do*-insertion hypothesis.

	Yes/no questions	Negative declaratives
Do	*Do you eat it?*	*You do not eat it.*
Be	*Are you eating?*	*You are not eating.*
Modal	*Will you eat it?*	*You will not eat it.*

TABLE 12. The predicted doubling error environment by the SAI hypothesis.

	Yes/no questions	Negative declaratives
Do	*Do you eat it?*	*You do not eat it.*
Be	*Are you eating?*	*You are not eating.*
Modal	*Will you eat it?*	*You will not eat it.*

TABLE 13. The predicted doubling error environment by the movement hypothesis.

	Yes/no questions	Negative declaratives
Do	*Do you eat it?*	*You do not eat it.*
Be	*Are you eating?*	*You are not eating.*
Modal	*Will you eat it?*	*You will not eat it.*

Maratsos and Kuczaj (1978) already reported that doubling errors were observed in *do*-negative declaratives but not in *be*-negative declaratives or modal negative declaratives, although the figures were not shown.[6]

No study on doubling errors has been conducted related to the *do*-insertion hypothesis, including corpus studies or experimental studies. One of the reasons for this might be that researchers have looked at Subject Auxiliary Inversion environments without classifying the question type in calculating the frequency of doubling errors. For example, Stromswold (1990) reported that young English-speaking children made doubling errors with a frequency of 0.4 % in the entire Subject Auxiliary Inversion environment. However, if the types of *yes/no* questions are classified and *do*-insertion contexts are distinguished from non-*do*-insertion contexts, the asymmetry that I showed above might have been found. Thus, the corpus study reported in this paper will fill this gap.

3.0. METHODOLOGY.

The study presented in the present paper consists of corpus analyses of the distribution of doubling errors in *yes/no* questions and that in negative declaratives. The analysis of distribution of doubling errors in *yes/no* questions aims to demonstrate the frequent occurrence of doubling errors in an environment involving movement of verbal element, SAI, and *do*-insertion over an environment involving movement of the verbal element and SAI, but not *do*-insertion. On the other hand, the analysis of the distribution of doubling errors in negative declaratives serves to demonstrate the frequent occurrence of doubling errors in an environment involving movement of the verbal element and *do*-insertion over an environment involving movement of the verbal element but not *do*-insertion. Note that SAI is factored out in the second analysis.

The contrast among the predictions of the three hypotheses has already been shown in Tables 11, 12 and 13. The subjects were selected from CHILDES as representative of Current Standard English-speaking children. The sample includes one male and two females, from ages 1;6 to 5;1: Adam (2;3 - 4;10), Eve (1;6 – 2;3), and Sarah (2;3 – 5;1) from Brown (1973). MLU is 1.829 –4.973 for Adam, 1.524-3.437 for Eve, and 1.505 – 4.857 for Sarah. In this corpus study, doubling of the exact same tense and number was counted as a doubling error. Uninflected *do* and uninflected main verbs are excluded from the counting of doubling errors, since it is impossible to distinguish whether these are finite or non-finite based on their forms in English.

4.0. RESULTS.

Table 14 shows that doubling errors occur in about 15% of *yes/no* questions that begin with *do* for all three children I investigated. However, they rarely occur in other types of *yes/no* questions. I also found that one of the three children (Sarah) made doubling errors at a frequency of 10.9% in *do*-negative declaratives, but rarely in other types of negative declaratives,[7] as shown in Table 15.

TABLE 14. Result from *yes/no* questions.

Yes/no questions	Adam	Eve	Sarah
Do	38/266 (14.6%)	1/3 (33.3%)	20/110 (18.2%)
Be	1/382 (0.0 %)	0/23 (0.0 %)	6/225 (2.7 %)
Modal	0/391 (0.0 %)	0/8 (0.0 %)	0/203 (0.0 %)

TABLE 15. Result from Sarah's negative declaratives.

Negative declaratives	Sarah
Do	19/174 (10.9 %)
Be	0/10 (0.0 %)
Modal	0/321 (0.0 %)

In sum, the asymmetry between *do*-context and non-*do* context was confirmed in *yes/no* questions for all three children investigated in this study and in negative declaratives for one of the three children.[8]

5.0. GENERAL DISCUSSION.

5.1. CROSS-LINGUISTIC MARKEDNESS OF *DO*-INSERTION.

Through the examination of *yes/no* questions, doubling errors were observed in about 15% of *yes/no* questions that begin with *do*, while they were rarely observed in other types of *yes/no* questions. The results support the *do*-insertion hypothesis over the SAI hypothesis and the movement hypothesis. Through the examination in negative declaratives, it was found that one of the three children (Sarah) made doubling errors at a frequency of 10.9% in *do*-negative declaratives, but rarely in other types of negative declaratives. This is strong evidence for the *do*-support hypothesis over the SAI hypothesis, since *do*-negative declaratives involve *do*-support but not SAI. This also undermines the movement hypothesis because there is no movement of a verbal element involved in *do*-negative declaratives.

This fine-grained analysis of a well-known phenomenon reveals that doubling errors occur almost exclusively in *do*-contexts. I argue that this general asymmetry between the frequency of doubling errors in *do*-contexts and non-*do*-contexts is due to the demands of *do*-support itself, not to an incorrectly internalized SAI rule or to an incorrectly formulated movement rule. This could be because *do*-support is a cross-linguistically marked process and a costly language-specific process.

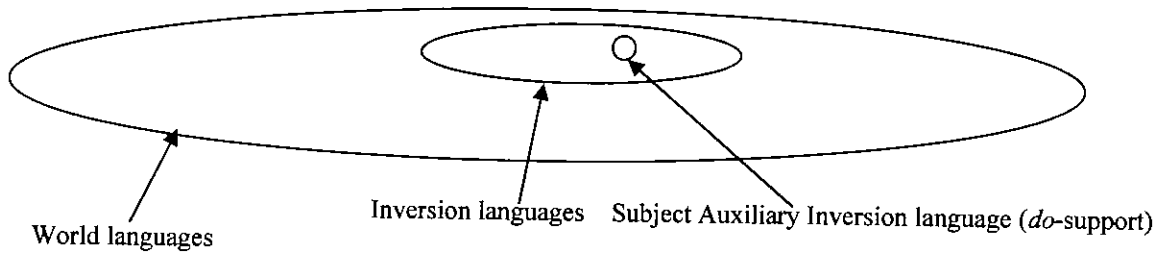
Do-insertion is peculiar to Current Standard English,[9] the only known Subject Auxiliary Inversion language among all the world languages. Tsunoda (1991) reported that out of 130 languages investigated, only 12 languages (German, French, Swedish, Norwegian, Danish, Dutch, Spanish, Czech, Hungarian, Serbo-Croatian, Italian, and Current Standard English) are Inversion languages. Inversion languages move the verbal element occurring to the right of the subject in a declarative sentence to the left of the subject to create an interrogative sentence. Inversion is geographically particular to Europe and genetically specific to Germanic, Romance, and Slavic branches of Indo-European language Family and Ugric branch of the Uralic language family. Among the 12 Inversion languages, only Current Standard English requires that the inverted element must be an auxiliary. The other 11 languages can create interrogatives by inverting the main verb. Tsunoda's observation is summarized in Table 16.

TABLE 16. The summary of the observation of Tsunoda (1991).

Languages	Inversion in creating interrogative	Subject Auxiliary Inversion in creating interrogative	*do-insertion*
Current Standard English	Yes	Yes	*Yes*
German, French, Swedish, Norwegian, Danish, Dutch, Spanish, Czech, Hungarian, Serbo-Croatian, Italian	Yes	No	*No*
Other 118 languages	No	No	*No*

That is, as the strategy for creating interrogatives, the process of inversion is cross-linguistically marked and the constraint that the inverted element has to be an auxiliary is highly marked (see Figure 7).

FIGURE 7. Subject Auxiliary Inversion language in world languages.



Further evidence for the claim that *do* is marked comes from Creole studies. Holm (1988) claims that there is nothing like *do*-support in the English-based creoles.

5.2. COST OF *DO*-INSERTION.

There is clearly a correlation between this constraint that the element to be inverted be auxiliary and *do*-insertion. Chomsky (1991) argues that this highly marked constraint triggers *do*-insertion. When there is no auxiliary to the right of the subject, *do* is inserted into this position as a "last resort" to accomplish inversion for interrogative formation. Consequently, the operation of inserting *do,* a by-product of this very marked constraint that the inverted element has to be an auxiliary, is also highly marked.

Assuming that a marked operation bears a greater cost, *do*-insertion might be the type of operation which is costly enough to cause processing errors. Instead, the cross-linguistic evidence provided in 5.1. supports the notion that *do* is a marked language-specific operation. In the framework of the Minimalist Program, *do*-insertion is considered to be not a part of UG but a language-specific rule (Chomsky 1991). Chomsky also proposes that UG principles are "less costly" than language-specific principles. Thus, *do*-support is a language-specific process which bears a greater cost. I claim that the cost of *do*-insertion is the main factor underlying doubling errors,[10] while the operation involved in question formation (e.g. Subject Auxiliary Inversion) is a secondary factor.

6.0. CONCLUDING REMARKS.

The SAI hypothesis, the movement hypothesis, and the *do*-insertion hypothesis of the L1 acquisition phenomenon of doubling errors have been evaluated in this study. Through the examination of *yes/no* questions and negative declaratives, the predictions of the *do*-insertion hypothesis, but not of the SAI hypothesis or the movement hypothesis, were confirmed.

An explanation for the non-occurrence of doubling errors in *do*-negative declaratives in Adam's speech could shed further light on this phenomenon, but is beyond the scope of this paper.[11] The investigation of doubling errors in other *do*-contexts (*wh*-questions and emphatic *do*) is ongoing. The difficulty of acquiring *do* is also expected in second language acquisition. This will be a fruitful topic for future research.

NOTES

1. This work was supported by Daiko Foundation research grant 5384.

2. Subject Auxiliary Inversion was not a settled rule for creating interrogatives in Early Modern English (Radford 1997). Some varieties of English, such as Jamaican Creole (Radford 1997) and Hawai'i Creole English (Carr 1972, Kent Sakoda personal communication), do not have Subject Auxiliary Inversion.
3. Recent work in transformational grammar (e.g., Chomsky 1993, 1995) does indeed adopt this 'copying and deletion' view of movement rules.
4. @ means unattested or very rare.
5. *Be*-negative declaratives involve V movement whereas the other two involve Agr movement. This difference is not important to the purpose of this paper, and the results in section 4 will show that there is no effect of verb type.
6. They quite rightly stated that *do*-negative declaratives were the only environment where doubling errors were observed. However, they did not provide examples or quantitative results.
7. Through the counting of doubling errors in *be*-contexts, it was observed that doubling errors are rare for both auxiliary *be* and main verb *be*.
8. A complication here, noted by William O'Grady, is that doubling in *do* patterns involves repetition of just a morphological feature (e.g. past tense of agreement), whereas doubling in other patterns involves repetition of an entire word. This introduces another factor into the comparison that will ultimately have to be taken into account.
9. Bonnie Schwartz pointed out that Bernese German has optional *do*-insertion (personal communication). The investigation of acquisition of optional *do*-support would be a useful topic for my further study.

10. *Do* is semantically null and not interpretable at LF. Thus, the high cost related to *do*-insertion may come from the semantic nullness of *do* not the insertion operation per se. However, in English, inserted elements are always semantically null, such as the expletives *it* and *there*. It is impossible to distinguish a "semantically null" hypothesis and an "insertion hypothesis"
11. The non-occurrence of doubling errors in *do*-negative declaratives of Eve is not significant since the total token of her *do*-negative declaratives is very small. This might be because Eve is very young.

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E AND *AE* IN PINGILAPESE[1]: WHAT ARE THEY? WHAT IS THE DIFFERENCE BETWEEN THEM?[2]

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ABSTRACT

This paper reports findings about the grammatical category and function of *e* and *ae* in Pingilapese, which are called "subject markers" in Good and Welley (1989). Two claims about *e* and *ae* will be made in this paper. The first claim is that *e* and *ae* are not subject markers in the traditional sense, but rather auxiliariy. The second claim is that Pingilapese makes evidential distinctions between *e* and *ae*. *E* encodes a high degree of evidentiality; the speaker is more certain that the information in her speech is true. *Ae* encodes a low degree of evidentiality; the speaker is less certain that the information in her speech is true. The support for these claims is drawn from language data elicited from a native speaker of Pingilapese.

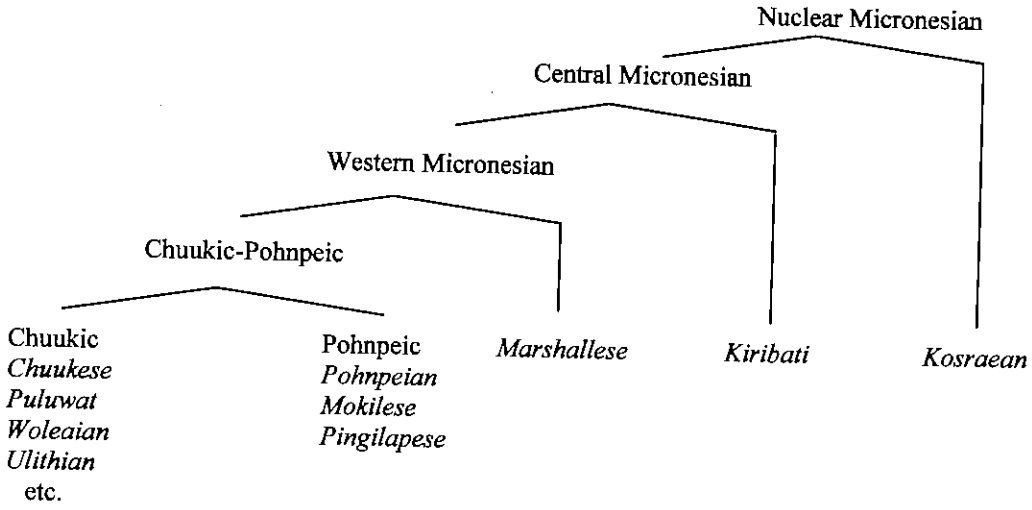
1.0. INTRODUCTION.

This paper will discuss the grammatical category of *e* and *ae* and the functional difference between the two. Through the examination of data elicited from a native speaker of Pingilapese, it is concluded that these two elements are auxiliaries and the difference between them is in the evidentiality each carries — i.e., the speaker's relative certainty about the truth of the proposition expressed (Chafe 1986, Mushin 2001, Payne 1997).

1.1. GENERAL DESCRIPTION OF PINGILAPESE.

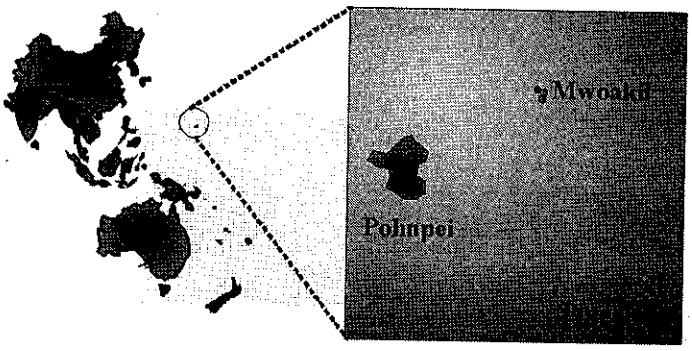
The language studied in this paper is Pingilapese, a language spoken by at most 3,000 speakers on Pingilap atoll and the high island of Pohnpei. Pingilapese belongs to the Pohnpeic branch of the Micronesian language family as shown in Figure 1, and is closely related to Pohnpeian with 79% lexical similarity between the two languages (Rehg 1981). The locations of Pingilap and Pohnpei are shown in Figure 2.

FIGURE 1. Membership and subgrouping of Micronesian languages.*



* Source: Jackson 1983: 433

FIGURE 2. The location of Pingilap and Pohnpei.*



* Source: Wellers 2003

Pingilapese is a language that has not been well documented; the only known study is by Good and Welley (1989). The case system of this language marks it as an accusative language. The subject pronoun of the transitive verb and of the intransitive verb are the same in form, in contrast to the form of object pronouns. Its basic word order is Subject-Verb-Object. It is considered to be a head-initial language, since the head of the phrase comes first (e.g., the head of the relative clause comes before the clause). Tense is not marked morphosyntactically. The difference between /e/ and /ɛ/ is phonemic. That is, the alternation of /e/ and /ɛ/ changes the meaning of the word. /e/ is spelled as *e*. /ɛ/ is spelled as *ae*.

1.2. RESEARCH QUESTIONS.

The elements investigated in this study are *e* and *ae,* which appear after the subject and before the verb, as shown in (1).

(1) Soahn { **e** / **ae** } kaukauruhr.
John ??? laughing
'John is laughing.'

Two research questions arise regarding these elements:

Question 1 What are the grammatical categories of *e* and *ae*?
Question 2 Is there any syntactical or functional difference between *e* and *ae*?

1.3. BACKGROUND INFORMATION OF LANGUAGE CONSULTANT.

To answer these questions, language data were collected from a native speaker of Pingilapese and analyzed in Fall 2002. My language consultant was a female trilingual speaker of Pingilapese, Pohnpeian, and English. She was an undergraduate who was studying linguistics at the University of Hawai'i at Mānoa and spoke English daily. She considered herself to be a native speaker of Pingilapese. She was born and raised in a community of Pingilapese on the high island of Pohnpei. She was 21 years old at the time of the elicitation session. It should be noted that Good and Welley's language consultant (1989), was the father of my consultant. Good and Welley's consultant was born and raised on the Pingilap atoll until his late teens, when he moved to the Pohnpei Island. Information about both consultants is summarized in Tables 1 and 2.

TABLE 1. Hattori's (2002) consultant.

Elicitation period:	Fall 2002
Languages:	Pingilapese, Pohnpeian, and English
Age at the period of elicitation:	21 years old
Gender:	Female
Place of Birth:	The Pingilapese community on the high island of Pohnpei
Place of residence while growing up:	The high island of Pohnpei
Note:	Daughter of the co-author of Good and Welley (1989)

TABLE 2. Good and Welley's (1989) consultant.

Elicitation period:	Before 1989
Languages:	Pingilapese, Pohnpeian, and English
Age at the period of elicitation:	Early 30s
Gender:	Male
Place of Birth:	Pingilap atoll
Place of residence while growing up:	Pingilap atoll , moved to the high island of Pohnpei in his late teen's
Note:	Father of the consultant of Hattori (2002)

2.0. WHAT IS THE GRAMMATICAL CATEGORY OF *E* AND *AE*?

Section two addresses the first question, about the grammatical category of *e* and *ae*. First, I will show evidence which undermines two hypotheses suggested by Good and Welley (1989). Then, I will provide evidence to disprove another possible hypothesis. Lastly, I propose that *e* and *ae* are in fact auxiliaries.

2.1. THE PART-OF-SUBJECT-NP HYPOTHESIS.

Good and Welley (1989), the only published study of Pingilapese, refers to the markers studied in this paper as subject markers. They described "subject markers" as follows.

> A subject marker occurs after the subject noun phrase in a sentence. It has not yet been determined whether subject markers are a part of the verb phrase or the subject noun phrase.
>
> Good and Welley (1989: 24)

Although they did not actually decide on the grammatical category of the markers, the authors refer to them as subject markers throughout their paper. The first hypothesis suggested by Good and Welley (1989) is the part-of-subject-NP hypothesis or subject marker hypothesis, which will be examined in this subsection. The second hypothesis is the part-of-VP hypothesis, which will be examined in Subsection 2.2.

There are problems with the part-of-subject-NP hypothesis. The first problem would arise if we consider subject markers as postpositions. Typologically, head-initial languages like Pingilapese, should have prepositions rather than postpositions. Having postpositions is odd in head-initial languages.

The second problem is that the markers studied inflect for aspect as can be seen in Table 3, the "subject marker" paradigm provided by Good and Welley (1989). According to them, *e* and *ae* are used if an action is happening at present or has happened in the not-too-distant past. If the speaker wants to specify an action that is completed, *en* is used. To indicate a positive intention and a negative intention, *aen* and *aeh* are used respectively. These variants appear to be marking aspectual distinctions. However, aspect is usually not carried by a subject marker.

TABLE 3. Good and Welley's (1989) subject marker. *

ae/e	present and not-too-distant past
en	completive
aen	positive intentive
aeh	negative intentive

* Source: Good and Welley 1989: 25

Further evidence to undermine the part-of-subject-NP hypothesis comes from existential sentences. Canonical word order in Pingilapese is Subject-Verb-Object. However, in existential sentences, the verb comes first and the subject follows the verb, as shown in (2). If *e* and *ae* are subject markers, they are expected to always appear after the subject noun as subject markers do in other languages. For example, the subject marker *–ga* in Japanese always appears after the subject noun even when the subject noun appears in non-canonical positions. Contrary to the expectation of the part-of-subject-NP hypothesis, *e* and *ae* always appear before the verb. (3) and (4) show that *e* and *ae* precede the verb rather than follow the subject even in subject-postposing. This indicates that *e* and *ae* are not subject markers.

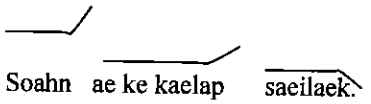
(2) *minae* construction with a postposed subject
Mahs mahs, minae pwoapwoaud.
Before before exist couple
'Once upon time, the couple existed.'

(3) *minae* construction with *e* before a verb and a postposed subject
Mahs mahs, e minae pwoapwoaud.
Before before SM exist couple
'Once upon time, the couple existed.'

(4) *minae* construction with a postposed subject and *e* after the postposed subject
* Mahs mahs, minae pwoapwoaud e.
Before before exist couple SM
'Once upon time, the couple existed.'

Further counter-evidence against the part-of-subject-NP hypothesis comes from sentential intonation. The part-of-subject-NP hypothesis predicts that intonation boundaries should not occur between a subject noun and *e* or *ae*. Contrary to this prediction, the intonation boundary is observed between the subject noun and *e* or *ae*. In Example (5), the subject noun forms a single intonation phrase while *ae*, *ke,* and the adverb form another intonation phrase. This, then, can be treated as further evidence for the claim that *e* and *ae* are not part of the subject NP.

(5) Intonation boundary between a subject noun and *ae*
Soahn ae ke kaelap saeilaek.
John SM will frequently travel
'John will frequently travel.'



Examples (3), (4), and (5) together provide convincing evidence that *e* and *ae* are not part of the subject NP, and are not subject markers. Hereafter, *e* and *ae* are referred to as the markers or simply *e* or *ae*. The gloss for these will be ??? until I establish a more definitive analysis in Subsection 2.4. Thus, in this subsection, the part-of-subject-NP hypothesis has been undermined. The next hypothesis to be evaluated is the part-of-VP hypothesis.

2.2. THE PART-OF-VP HYPOTHESIS.

Some may argue that the markers studied here are part of the VP, directly connected to the verb, like affixes or clitics. Counter-evidence to this hypothesis comes from the fact that negative words, adverbs, modal preverbals, and adverbial preverbals can intervene between *e* or *ae* and the verb as shown in (6), (7), (8) and (9) respectively. These suggest that *e* or *ae* is not directly connected to the verb. Furthermore, the fact that negative words, which are generally considered to be outside VP, occur to the right of the marker investigated here strongly undermine the part-of-VP hypothesis.

(6) Negative word between the marker under discussion and a verb.
Soahn ae kasikaeh wei -mwaeiang-aela.
John ??? not-yet dig -taro -compl.
'John has not yet dug taro.'

(7) Adverb between the marker under discussion and a verb.
Soahn ae peineh saeisaeiloak.
John ??? still traveling
'John is still traveling.'

(8) Modal preverbal between a marker under discussion and a verb.
Eh perian -emen aen kah ahdoa.
His friend -one ??? will come
'His friend will come.'

(9) Adverbial preverbal between the marker under discussion and a verb.
Soahn daekah Maeri ae kaken kohpeda melimel.
John and Mary ??? can predict typhoon
'John and Mary can predict the typhoon.'

Further counter-evidence against the part-of-VP hypothesis comes from the fact that *e* and *ae* do not always appear with a verb. In general, affixes or clitics cannot be dropped. (10) and (11) are examples of French clitics in coordinate conjunctions. Here, the clitic cannot be dropped in the second clause.

(10) Clitic is expressed in the second clause (French)
Je mangeais et je buvais.
I eat and I drink
'I eat and drink.'

(11) Clitic is dropped in the second clause (French)
*Je mangeais et buvais.
I eat and drink
'I eat and drink.'

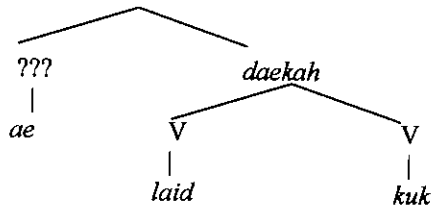
The markers studied here behave differently from French clitics in coordinate conjunction. (12) and (13) are examples of the marker studied here in coordinate conjunctions. Here the marker cannot appear in the second clause.

(12) The marker under discussion is expressed in the second clause
*Eh perian -pwi ae laid daekah ae kuk.
His friend -pl. ??? fish and ??? cook
'His friends fish and cook.'

(13) The marker under discussion is dropped in the second clause
Eh perian -pwi ae laid daekah kuk.
His friend -pl. ??? fish and cook
'His friends fish and cook.'

The fact that *e* or *ae* can be dropped suggests that these are outside of the constituent of the verb, as shown in Figure 3, and thus are not affixes or clitics. The marker seems to have scope over the conjoined VPs and therefore lies outside of VPs.

FIGURE 3. Structure of coordinate conjunction.



All of the examples discussed in this subsection suggest that neither *e* nor *ae* is part of a verb, but rather, is independent of the verb.

2.3. THE THIRD-PERSON-SINGULAR-PRONOUN HYPOTHESIS.

If *e* and *ae* are not part of the subject NP nor part of the VP, then what grammatical category are they? Another possibility that many linguists might suggest is the third-person-singular-pronoun hypothesis. Good and Welley (1989) consider that some forms of the third person singular pronouns in Pingilapese are also *e* or *ae*.[3] So, some may claim that *e* or *ae* between subject noun and verb is also a third person singular pronoun, like *John he fish* literally in English. Under the third-person-singular-pronoun hypothesis, the reference of the markers studied here is expected to be third person singular. Contrary to this expectation, the noun preceding the marker, which should be the antecedent of the marker under the third-person-singular-pronoun hypothesis, can be plural and can be non-third person as shown in (14). (14) indicates that the marker under discussion does not carry any person or number feature. This is counted as counter-evidence against the third-person-singular-pronoun hypothesis.

(14) Non-singular non-third person subject and the marker under discussion

Irahsi	daekah	kaewae	ae	laid.
They(pl)	and	you	???	fish

'They and you fish.'

2.4. THE AUXILIARY HYPOTHESIS.

The part-of-subject-NP hypothesis, the part-of-VP hypothesis, and the third-person-singular-pronoun hypothesis have been evaluated in the previous subsections and it turned out that the predictions of each hypothesis have not been confirmed. In their place, I propose that *e* and *ae* are auxiliaries.

As shown in Table 3, *e* and *ae* inflect for aspect. Aspectual information is usually carried by elements which deal with the proposition (elements in the verb phrase in traditional grammar or in IP in Generative Grammar), auxiliaries or verbs. Thus, the fact that *e* and *ae* inflect for aspect suggests that they are auxiliaries. The examples of existential sentences, (3) and (4), showed that *e* or *ae* goes with the verb rather than the subject noun. Again, this is a characteristic of auxiliaries. In (6)-(9), things can intervene between *e* or *ae* and the verb, the same as what is observed between auxiliaries and verbs in other languages.

The markers in Pingilapese and auxiliaries in English behave similarly in coordinate conjunctions. (12) and (13) are examples of Pingilapese coordinate conjunctions. While the marker being expressed in the second clause sounds odd as in (12), it sounds natural in (13) where it is dropped in the second clause. On the other hand, (15) and (16) are examples of English coordinate conjunctions. While an auxiliary is expressed in the second clause in (15), it is dropped in the second clause in (16). (15) can be compared to (12) and (16) to (13). (15) sounds odd in English, the same as (12) does in Pingilapese. (16) sounds natural in English, the same as (13) does in Pingilapese. Thus, the markers in Pingilapese and auxiliaries in English are similar in terms of their absence in second clause in the coordinate conjunction.

(15) An auxiliary is expressed in the second clause (English)
*I will eat and will drink.

(16) An auxiliary is dropped in the second clause (English)
I will eat and drink.

A linear ordering analysis of the grammatical categories provides evidence that the marker investigated in this paper seems to have a position corresponding to auxiliaries in English. The linear ordering of subject, auxiliary, negative word, adverb and verb in English is shown in (17). The ordering of subject, *e* or *ae*, negative word, adverb, and verb in Pingilapese is shown in (18). Parallelism is observed between (17) and (18), and the *e* or *ae* in Pingilapese seems to have a position corresponding to the auxiliaries in English.[4] All the evidence provided above convincingly supports for the claim that *e* and *ae* in Pingilapese are in fact auxiliaries. Hereafter, I refer to *e* and *ae* as auxiliaries, not as subject markers.

(17) Category order in English

Subject	auxiliary	(negative word)	(adverb)	verb
John	does	not	frequently	fish

(18) Category order in Pingilapese

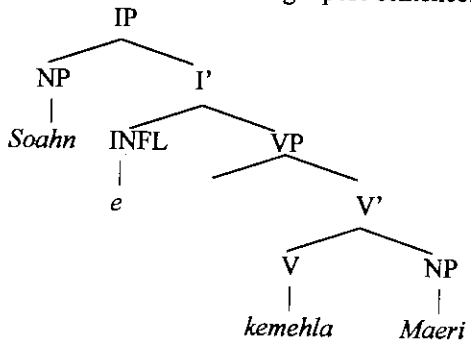
Subject	???	(negative word)	(adverb)	verb
Soahn	e/ae	saewaeh	kaelap	laid

'John does not frequently fish.'

For the sake of exposition, I will assume that the marker is located under INFL node in the structure in the framework of Government and Binding theory. In the framework, aspectual elements are considered to be under INFL. Since *e* and *ae* show aspectual inflection, they are understood to be located under INFL. Figure 4 shows the structure of Sentence (19) in the framework of Government and Binding theory. Here, the marker discussed in this paper is located under INFL.

(19) Soahn e kemehla Maeri.
John AUX kill Mary
'John kills Mary.'

FIGURE 4. Tree structure of Pingilapese sentence.



The structure of (13) and (16), coordinate conjunctions in Pingilapese and English, are described in Figures 5 and 6 respectively. Here, the parallelism between the structures of coordinate conjunctions in English and Pingilapese is shown.

FIGURE 5. Structure of Pingilapese coordinate conjunction sentence.

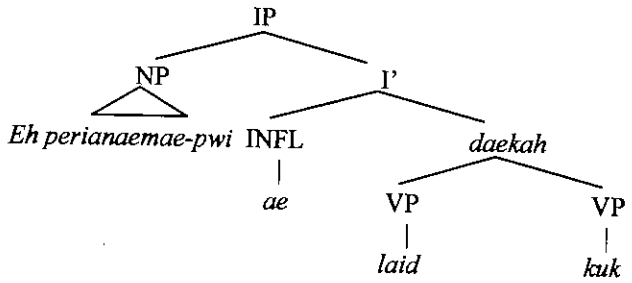
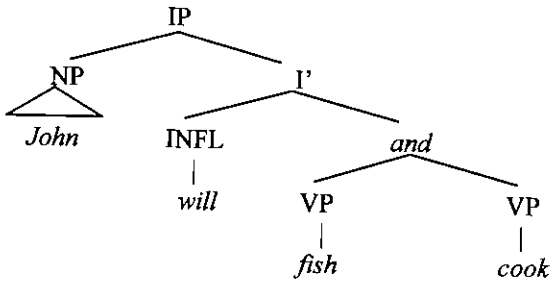


FIGURE 6. Structure of English coordinate conjunction sentence.



In this section, I have answered the first question, what are *e* and *ae*? I have shown that the most likely grammatical category for *e* and *ae* is that of auxiliaries and their structure positioning is under INFL. In the next section, the functional difference between *e* and *ae* is discussed.

3.0. IS THERE ANY SYNTACTICAL OR FUNCTIONAL DIFFERENCE BETWEEN *E* AND *AE*?

In this section, I will address the second question: is there any syntactical or functional difference between *e* and *ae*? Good and Welley (1989) report that *e* and *ae* are in free variation. Under their analysis, sentences which are different only in terms of the form of auxiliaries, such as (20) and (21), would have the same meaning. However, since *e* and *ae* are phonemic in Pingilapese, it is natural to assume that they are syntactically or functionally different.

From the language data elicited from my consultant, I have observed that she makes evidential distinctions between *e* and *ae*. *E* encodes a high degree of evidentiality; the speaker is more certain that the information in her speech is true. *Ae* encodes a low degree of evidentiality; the speaker is less certain that the information in her speech is true. Examples to support this claim are provided below.

Examples (20) and (21) differ in their meaning. (20) with *e* implies that the speaker is rather certain that the proposition is true (similar to the meaning of *definitely* in English). (21) with *ae* implies that the speaker is less certain that the proposition is true (similar to the meaning of *probably* in English).

(20) Soahn e laid.
John AUX fish
'(Definitely) John fishes/is fishing.'

(21) Soahn ae laid.
John AUX fish
'(Probably) John fishes/is fishing.'

In Examples (22) and (23), the information is firsthand and the speaker is very sure that the information she is encoding is true. In this case, *e* is preferred.

(22) Ngaei kila pwa Soahn e laid.
I see that John AUX fish
'I saw that John was fishing.'

(23) Ngaei kila pwa Soahn ae laid.
I see that John AUX fish
'I saw that John was fishing.'

In contrast, in Sentences (24) and (25), the information is secondhand and the speaker is less sure that the information she is encoding is true. In this case, *ae* is preferred.

(24) Ngaei rong pwa Soahn e laid.
I heard that John AUX fish
'I heard that John was fishing.'

(25) Ngaei rong pwa Soahn ae laid.
I heard that John AUX fish
'I heard that John was fishing.'

Examples (26) and (27) are interrogative sentences. In the case of interrogative sentences, *ae* is preferred, since the speakers are not sure about the truth value of the propositions. This is supported by the claim of Mondorf (2002) that non-declarative speech is one of the means to signal that the speaker has no commitment to the truth value of the proposition.

(26) Soahn e laid ?
John AUX fish
'Does John fish? / Is John fishing?'

(27) Soahn ae laid ?
John AUX fish
'Does John fish? / Is John fishing?'

The subjects in (28) and (29) are first person. In this case, *e* is preferred, because usually speakers are certain about themselves.

(28) E minae ngaei.
AUX exist I
'I exist.'

(29) Ae minae ngaei.
AUX exist I
'I exist.'

E is found in the completive auxiliary, *en*, and *ae* is found in the intentive auxiliary, *aen*, as in (30) and (31) respectively. It is understood that a completed event is more certain whereas an intentive event, which is not completed yet, is less certain. Hopper and Thomson (1985) claim that a purpose clause denotes an unrealized state of affairs. Hopper and Thomson (1985) claim that a purpose clause denotes an unrealized state of affairs. Furthermore, Givón (1984) proposes that the degree of commitment to the proposition of an irrealis assertion is low, which brings evidentiality into the picture. The combination of both Hopper and Thompson and Givón leads me to conclude that the distribution of *e* and *ae* in the completive and intentive forms of auxiliaries supports the view that *e* is related to a more certain event and *ae* is related to a less certain event.

(30) Soahn en ahla laid.
John AUX go fish
'John has already gone fishing.'

(31) Soahn aen ahla laid.
John AUX go fish
'John may go fishing.'

In this section, I have answered the second question, about the difference between *e* and *ae*. I have shown that there is evidential difference between *e* and *ae*. *E* encodes a high degree of evidentiality and *ae* encodes a low degree of evidentiality. This finding also supports the auxiliary hypothesis I claimed in the previous section, since evidentiality deals with the proposition and is more likely encoded by the verbal element.[5] Payne (1997) claims that languages where evidentiality is grammaticalized make evidential and epistemic distinctions in the verbal morphology and claims that the evidential system of these languages is almost always linked to the tense/aspect/mode (TAM) system. Payne's claims show a perfect match to the claims made in the previous section and this section.

Additionally, it has been reported that the distinction between realis mood and irrealis mood is displayed in the alternation of root-initial consonants in a few areas within the Oceanic region (Lynch 1998). The evidential distinction made by auxiliaries in Pingilapese is similar to the realis and irriealis distinction reported in Lynch, although the means of expressing the distinction are different. Although Pohnpeian, which is said to be most closely related to Pingilapese, does not have equivalent forms to the auxiliaries reported in this paper (Rehg 1981), Paul Lassettre (personal communication), interestingly, suggested that Mortlockese, a Chuukic language, has linguistic forms which are very similar to *e* and *ae* reported in this paper. The forms appear after the subject and before the verb and they carry person and aspect information. They express realis and irrealis distinction, as well. This suggests that further search for similar evidential auxiliaries in Micronesian languages, especially Chuukic languages, would be highly fruitful.

4.0. CONCLUSION

In conclusion, while *e* and *ae* in Pingilapese have been called subject markers and are considered to be in free variation (Good and Welley 1989), in this paper it is argued that the two forms are in fact auxiliaries, and encode evidential distinctions: the speaker's relative certainty about the truth of the proposition expressed. *E* encodes a high degree of evidentiality; the speaker is more certain that the information in her speech is true. *Ae* encodes a low degree of evidentiality; in this case, the speaker is less certain that the information in her speech is true. To make the conclusions of this study more valid, elicitation data from more native speakers and data collected from language corpora are needed. This is the first study to report the role of evidentiality in any Micronesian language (Kenneth Rehg, personal communication). This report can serve to expand research on Micronesian languages into pragmatic analyses.

NOTES

1. *E* and *ae* are Pingilapese spelling symbols. Their phonemic equivalents are /e/ and /ɛ/ respectively. For more detail of Pingilapese spellying system, see Good and Welley (1989).
2. My thanks go to Billie Jean Welley, my language consultant, for her patience and flexibility. I also thank Professor Kenneth Rehg and his Linguistics 630 class (Field methods, Fall 2002) for giving me an opportunity to work on Pingilapese, and Professor George Yule for helping me add a functionalist view to this paper.
3. Good and Welley (1989) claim that *e* or *ae* in *e peren* or *ae* in *ae peren* which is literary translated as 'he is happy' in English, is the third person singular pronoun. However, I feel that more study is needed to determine their grammatical status. I am working on this issue now.
4. Some may suspect that the markers under discussion are modal adverbs not auxiliaries. However, their location is fixed, which is a characteristic of auxiliaries rather than adverbs. In general, adverbs can appear in various places.

5. Some may ask whether the linguistic forms under discussion are modal particles like Japanese *-ne* (Kuno 1973). However, this is not the case, because *e* and *ae* carry aspectual information. Aspect is semantically more closely related to the verb (Palmer 1986).

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SUMMARY OF RATES OF LEXICAL CHANGE: PROBLEMS OF VOCABULARY-BASED ANALYSES*

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This paper summarizes means and methods of linguistic subgrouping mainly focusing on the Austronesian language family. First, fundamental information about basic vocabulary and cultural vocabulary will be presented. Second, the background of lexicostatistics as well as the Comparative Method will be discussed under the heading of rates of lexical change. Then, problems about the vocabulary-based subgrouping founded on lexicostatistics and 'homomeries' will be mentioned in comparison with an alternative model of subgrouping supported by exclusively shared innovations, followed by a topic of 'universal constant' concerning rates of lexical change. Lastly, the issue of morphologically complex words and their role in subgrouping for some Austronesian language will be introduced in brief. Pertaining to rates of lexical change and linguistic subgrouping, the vocabulary-based framework cannot provide dependable analyses because they are founded on linguistically unreliable evidence (that does not differentiate exclusively shared innovations from retentions within subgroups). Instead of employing lexicostatistics or 'homomeries,' a linguistically reliable method such as the Comparative Method should be applied to subgrouping analysis.

1.0. INTRODUCTION

In this paper, I will discuss rates of lexical change of Austronesian languages. Rates of lexical change are traditionally measured with respect to change in basic vocabulary (hereafter BV), based on Indo-European languages. The original BV list was created by Morris Swadesh and has been adopted by many linguists, especially in the fields of historical, comparative and field linguistics. Crowley refers to BV as "core vocabulary" and explains, "there are certain parts of the lexicon in which words are less likely to be completely replaced by non-cognate forms" (171). A method called lexicostatistics was created to measure rates of lexical change founded on BV and a statistical technique. Lexicostatistics was used in historical linguistics mainly to show subgrouping of languages; however, as Blust points out, "The fundamental problem with lexicostatistics is that it is known to give seriously misleading subgrouping results in large-scale comparisons at time depths of roughly 5000-6000 years" ("Lexicostatistics" 311). This paper will report on both the use of BV and the problems inherent with the vocabulary-based subgrouping analyses.

2.0. BASIC VS. CULTURAL VOCABULARY

2.1. BASIC AND CULTURAL VOCABULARY

In historical linguistics, two different types of vocabulary—basic vocabulary and cultural (non-basic) vocabulary—can be used when investigating subgrouping or prehistoric evidence concerning languages and people. In a language contact situation, it is natural for languages to borrow words from one another. For example, Japanese has borrowed terms such as *aisu-kuriimu* 'ice cream' or *basu* 'bus' from English, and English has adopted terms such as *karaoke* or *kimono* from Japanese. According to Crowley, languages are more likely to borrow words from other languages in the area of culture-specific meanings. Points of cultural vocabulary will be further discussed below, after the notion of BV (155).

BV is used to find general cognates among language families through universal concepts. BV is "basically vocabulary that we can expect to find in all human languages" (Crowley 155). Universal concepts that tend to exist in all languages, such as words for 'mother' or 'eye,' are often used to see genetic relationships among languages. For example, within the Germanic branch of the Indo-European Language family, the English word *mother* and its German equivalent *Mutter* can easily be recognized as cognates, and thus, be used as linguistic evidence to support a genetic relationship between the two languages in a family tree model. In the same manner, the Malay word *mata* 'eye' and its equivalent in Hawaiian *maka* 'eye' can also form linguistic evidence to establish the genetic relationship of these two geographically distant languages within the Austronesian language family.

While BV is nearly universal in the languages of the world, cultural vocabulary depends on the area of the world since it will not be based on the same concepts. Crowley gives following examples of cultural vocabulary (he states only some languages have words to express these meanings).

(1) Examples of Cultural Vocabulary (Crowley 155)
a. *tepee* and *peace-pipe* (in North America)
b. *frost* and *snow* (in non-tropic climates)
c. *kava* and *tapa cloth* (in the South Pacific)
d. *dreamtime* and *rainbow serpent*[1] (in Aboriginal Australia)
e. *earthquake* and *lahar* (in geologically unstable areas)
f. *television* (in western technological societies)
g. *holy war* and *muezzin* (in Muslim societies)
h. *trinity* and *resurrection* (in Christian societies)

In the original Swadesh list, items for weather-related terms such as *freeze*, *ice*, and *snow* are treated as a part of BV. In the above examples of cultural vocabulary, Crowley suggests that environmentally sensitive terms such as (1b) *frost* and *snow* and (1e) *earthquake* and *lahar* are "cultural vocabulary." However, he does not explain why and in what sense these particular items be called "cultural vocabulary" rather than BV. On the other hand, terms such as 'coconut,' 'betel nut,' or 'domesticated pig' may be easily justified as cultural vocabulary which play a role in establishing the Austronesian language family tree. Moreover, these culturally specific words may contribute to explaining prehistoric events of languages and people, shedding light on ancient cultural behaviors or migration patterns. According to Blust (Personal Interview. 13 Sept. 2002), collaborative work between comparative linguistics and archaeology should provide stronger evidence of prehistory, especially in areas where written records are unavailable, such as in the areas covered by Austronesian languages.

2.2. BORROWABILITY

Almost any word, including BV, can be borrowed in a language contact situation; however, there is a greater tendency for cultural vocabulary to be borrowed than BV. Logically speaking, it is reasonable that BV are not likely to be borrowed since one of the main motivations for borrowing is to fill a lexical gap between languages in contact, especially when a specific word does not exist in one language. Nevertheless, there are some borrowings of BV terms in some languages despite this logic. According to Shibatani, modern Japanese has borrowed words even those words whose equivalents already existed in the language (861), such as some color terms (native BV) from English, gaining synonymous expressions with contrasting stylistic values. Native color words such as *aka* 'red,' *ao* 'blue,' *kiiro* 'yellow,' *midori* 'green,' *momoiro* 'pink,' or *kuro* 'black' are often recognized in English loan forms *reddo*, *buruu*, *ieroo*, *guriin*, *pinku*, or *burakku*, respectively. The distinctions between the native and borrowed forms in the Japanese color terms are nothing more than stylistic (sociolinguistic) differences in shades of meanings.

Crowley reports similar examples from Paamese, an Austronesian language spoken in Vanuatu (157). The younger generations of Paamese speakers frequently use the English-derived words *buus* 'bush' and *kaaren* 'garden' instead of the indigenous equivalents *leiai* and *aah* that their parents and grandparents use (Crowley 157). Logically, there is no need for this borrowing since the Paamese language already had perfectly good words to express *bush* or *garden*. Crowley states that although it is difficult to find a good explanation, there may be a socio-linguistic reason behind the use of the English loanwords in Paamese (157). That is, when speakers of Pacific languages use words that are borrowed from English, "they may simply be trying to say that they consider themselves to be much more of the modern world than old-fashioned world of their grandparents" (Crowley 157).

However, unless there is some style-shifting or code-switching, BV terms do not need to be borrowed because they already exist in most languages. The original BV list by Swadesh consists of 200 words in different categories. Examples of the original BV include:

(2) Examples of Basic Vocabulary (Blust, Robert. Personal Interview. 13 Sept. 2002)
a. *body parts*: back, belly, blood, bone, ear, eye, foot, leg, etc.
b. *natural phenomena*: ashes, cloud, dust, earth, etc.
c. *basic kinship terms*: child, father, mother, etc.
d. *basic verbs*: bite, burn, blow, come, cook, count, cut, dance, die, etc.
e. *descriptive terms (stative adjectives)*: bad, big, black, cold, dirty, fat, good, long, etc.
f. *low numerals*: one, two, three, etc.
g. *function morphemes*: all, and, at, if, how, that, this, when, where, etc.

2.3. PROBLEMS IN BASIC VOCABULARY

Although the original BV list is useful, it was criticized for being heavily based on the semantic structure of Indo-European languages. In other words, Swadesh's BV list cannot represent a universal inventory. Hoijer criticized the list for not being able to account for semantic categories in Navajo (i.e., *bark of a tree* → smooth bark or rough bark?). In filling in the 100-word BV list, Hoijer found 28 problems, which affected a total of 39 items in Navajo language (50-52). Concerning Austronesian languages, Blust demonstrates a number of examples why Swadesh's BV list does not work universally (Blust, Robert. Personal Interview. 13 Sept. 2002). Examples given by Blust include:

(3) Examples of Basic Vocabulary that are inappropriate for Austronesian languages
a. *animal*: there is no generic terms for 'animal' in many Austronesian languages.
b. *belly*: some languages share different notions for this word. E.g., in Thao, there are two words to represent 'belly'—one above and the other below the navel.

Thao			
	tiaz	belly	above navel
	futulh	belly	below navel

c. *to blow*: (as in b), some languages such as Western Bukidnon Manobo have two different meanings for this word—one by wind, and the other by a human mouth.

Manobo			
	keramaq	to blow	by wind
	hiyup	to blow	by mouth

d. *to cut*: there are too many different meanings for cutting in Austronesian languages in general. E.g., In many Austronesian languages, to cut wood, to cut bamboo, to cut meat, etc., have all different words for English 'to cut.'
e. *dull*: the meaning is too ambiguous in some Austronesian languages.
f. *hair*: this word does not correspond to the words on Swadesh list. E.g., head hair and body hair are two different things.

Malay			
	rambut	hair	on the head
	bulu	hair	on the body, or soft feather

g. *long*: the meaning differs depending on physical dimension or time.
h. *narrow*: in some Austronesian languages, small and narrow are the same thing.
i. *old*: the meaning differs depending on whether the reference is to people or things.
j. *rotten*: the meaning differs depending on the item being rotten—meat or vegetable.
k. *to sew*: the meaning differs depending on the item being sewn—cloth or thatch.
l. *worm*: the meaning differs depending on the worm—earthworms or maggots/caterpillars.
m. *brother/sister*: the words differ depending on the gender or age relationships.

Malay		
	kakak	older sibling of either sex
	adik	younger sibling of either sex

n. *root*: different words are used depending on types of roots in some Austronesian languages, such as tap roots, aerial roots, fibrous roots, or buttress roots.

Blust (Personal Interview. 13 Sept. 2002) concludes that the problems represented in the above examples are due to ambiguity of words (e.g., *dull, long, old*, etc.) or differences in human experiences. It is understandable why words such as *ice, snow, sea*, or *ocean* are not universally shared notions.

To solve the problems in the original BV list, Blust modified the Swadesh list for Austronesian languages. Blust (1981) explains that his list replaced 31 items on the original Swadesh list: *freeze, ice* and *snow* because of their environmental inappropriateness; *brother* and *sister* because the sibling terminologies of many Austronesian languages operate with a parameter of relative sex; *cut, play, sing* and some other verbs

because they are hopelessly ambiguous in many Austronesian languages, or have no clear equivalent; 'sun' because the Proto Malayo Polynesian term '= eye of the day,' and both *eye* and *day* appear separately on Swadesh list ("Lexicostatistics" 321). In summary, Blust treats the weather-related terms more effectively than Crowley to be used for linguistic work whether they belong to 'basic' or 'cultural' vocabulary.

3.0. LEXICOSTATISTICS

3.1. BACKGROUND OF LEXICOSTATISTICS

Crystal defines lexicostatistics as follows (221):

> A technique used in GLOTTOCHRONOLOGY with which one attempts to make quantitative comparisons between the rates of change within sets of LEXICAL ITEMS in hypothetically related LANGUAGES, and thus to deduce the distance in time since the languages separated. Other types of lexical comparison (e.g. to determine the mutual intelligibility of languages) may also be referred to by this label.

This definition is rather inadequate since glottochronology is a part of lexicostatistics, not the other way around (Blust, Robert. Personal Interview 13 Sept. 2002). According to Swadesh, glottochronology was inspired by a method of dating organic remains using measurements based on the half-life of radioactive carbon 14 (454). This method as Blust suggests was influenced by "the archaeologist A. E. Douglass (1929), who over two decades earlier had developed an influential method of tree ring dating, or 'dendrochronology,' for use in the arid regions of the American Southwest" ("Lexicostatistics" 320).

As mentioned in the previous section, an Indo-European bias in the original BV list has been pointed out by many scholars. That is, the semantic fields of many languages in other parts of the world are shaped differently from the Indo-European notions.

Lees studied the retention rates of BV in thirteen languages with historical documents going back more than thousand years and found a close clustering about a 'universal constant' rate of change (qtd. in Blust, "Lexicostatistics" 318). Lees claimed that 90% of "all human languages" have retention rates of 80.48% ± 1.76%, or cluster between roughly 78.7% and 82.3% (qtd. in Blust, "Lexicostatistics" 318). Early criticism of the Lees study came from Bergsland and Vogt (qtd. in Blust, "Lexicostatistics" 319) who showed that some languages have much higher retention rates than Lees's claim (e.g., Icelandic 98%, Armenian 94%).

3.2. EARLY CRITICISM OF LEXICOSTATISTICS

Later, Guy made another argument against Lees's 'universal constant,' claiming a sampling bias in this study. According to Guy, out of thirteen languages sampled by Lees, eleven are European languages, including six Romance languages. Guy (qtd. in Blust, "Lexicostatistics" 319) explains Lees' method in a critical manner.

> (1) Take 13 languages, 11 Indo-European, 6 Romance out of which two are northern Iberian, most of which have been at some time the official languages of large empires, (2) Calculate mean retention rates for Spanish and Portuguese, (3) Calculate mean retention rates for the remaining Romance languages, (4) Calculate the retention rates for Cypriot, Athenian and Coptic, (5) Calculate the retention rates for the remaining languages, (6) Claim that the retention rates obtained are representative of all possible languages.

Then, Guy (qtd. in Blust, "Lexicostatistics" 319) makes the following analogy:

> (1) Take 13 people, 11 related, 4 cousins, 2 brothers, most of them male adults of the same age group, (2) Record as the height of each brother the mean of his own height with that of his father, (3) Record as the height of each of the four cousins the figure obtained by adding one tenth of the height of his paternal grandfather to nine tenths of the mean of his own height with that of his gather, (4) Pick three other people and record as the height of each the mean of his own height with his father's, (5) Record the actual heights of the remaining four people, (6) Claim that the heights recorded are representative of the individual heights of all human beings, irrespective of age, sex, or race.

As Blust states, "There can be little question that the set of thirteen languages chosen by Lees to establish the existence of a 'universal constant' is seriously flawed by sample bias" (319 "Lexicostatistics"). This sampling bias is, however, an inevitable weakness in the foundation of lexicostatistics because "only a tiny fraction of all human languages" ("Lexicostatistics" 319) have a documentary history of at least a millennium to be analyzed by this method.

Hymes separates the lexicostatistical theory into two types, control cases and cases of application (3).

(4) The two types of lexicostatistical case studies ("Lexicostatistics" 320)

	Control ('vertical')	**Application ('horizontal')**
Retention Rate	?	given (.81/mill.)
Divergence Time	known	?
Cognate Percentage	calculable vertically (.81/mill.)	calculable horizontally

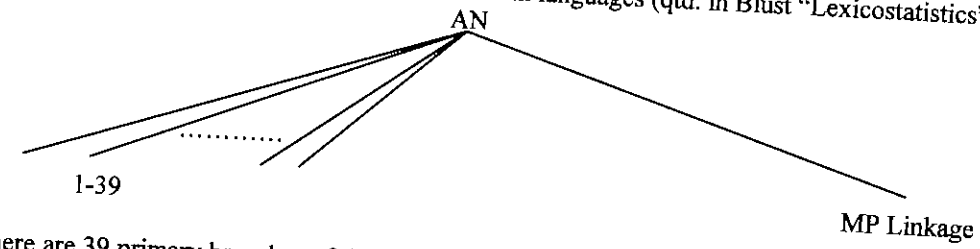
Blust summarizes the two types of lexicostatistical case studies in (4). First, vertical comparisons appeared to provide new information about linguistic regularities. Second, the retention rates derived from the vertical comparison are applied in horizontal comparisons, to determine divergence time between related languages in the absence of a historical record, at least in theory ("Lexicostatistics" 320).

3.3. SUBGROUPING

3.3.1. DYEN'S MODEL

Dyen presents a subgrouping of the Austronesian languages on the basis of lexicostatistical comparisons of 245 languages. The following figure (5) shows his view of the higher-level branches of the Austronesian language family.

(5) A lexicostatistical classification of the Austronesian languages (qtd. in Blust "Lexicostatistics" 311)

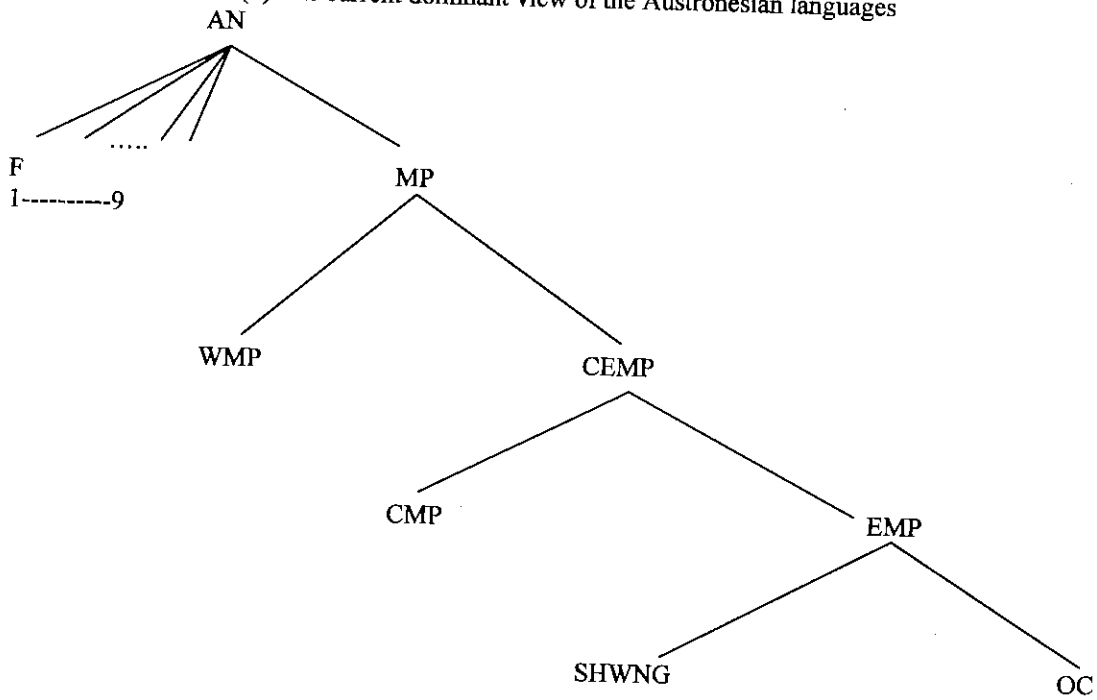


There are 39 primary branches of the Austronesian language family, of which 24 are single languages. MP Linkage (= the Malayo-Polynesian Linkage) refers to a lexicostatistically-defined subgroup which includes 129 of the 245 languages used in Dyen's study. The MP Linkage is divided into seven internal primary branches ("Lexicostatistics" 311). According to Dyen's lexicostatistic analysis, the homeland of Austronesian languages would have been located somewhere in Micronesia or Melanesia.

3.3.2. BLUST'S MODEL

The following figure in (6) shows the current dominant view of the higher-level branches of the Austronesian language family suggested by Blust ("Lexicostatistics" 311; "The Proto-Austronesian" 5).

(6) The current dominant view of the Austronesian languages



Blust summarizes the subgroups described in the figure (6) as follows: AN (= Austronesian) comprises roughly about 1000 languages spoken in insular Southeast Asia, parts of mainland Southeast Asia, Madagascar, and the Pacific islands of Melanesia (excluding most of New Guinea), Micronesia and Polynesia. This is the highest node of the Austronesian Language Family for both (5) and (6). F (= Formosan) covers the AN languages of Taiwan including fourteen surviving and twelve extinct languages. Blust estimates that there are about nine primary branches of the entire language family under this heading. MP (= Malayo-Polynesian) is a large subgroup that includes all AN languages spoken outside Taiwan, while WMP (= Western Malayo-Polynesian) includes only the languages of the Philippines and western Indonesia (Borneo, Sulawesi, Sumatra, Java, Bali, Lombok, western Sumbawa), the Chamic languages and Moken-Moklen of mainland Southeast Asia, Malagasy, and the western Micronesian languages of Palauan and Chamorro. CEMP (= Central-Eastern Malayo-Polynesian) covers all of the AN languages of eastern Indonesia and the Pacific exclusive of Palauan and Chamorro. CMP (= Central Malayo-Polynesian) has over 100 languages in the lesser Sunda, and the central and southern Moluccas of eastern Indonesia. EMP (= Eastern Malayo-Polynesian) includes two subgroups in the language family—SHWNG and OC. First, SHWNG (= South Halmahera-West New Guinea) languages are spoken in the southern half of the island of Halmahera in the northern Moluccas, as well as on the northern coast of the Bird's Head peninsula of New Guinea. Second, OC (= Oceanic) includes the coastal regions of New Guinea, the Bismarck archipelago, the Massim region to the southeast of New Guinea, the Solomon islands, Vanuatu, New Caledonia and the Loyalty Islands, Micronesia, Fiji and Polynesia.

3.4. HOMELAND OF AUSTRONESIAN LANGUAGE

According to Crowley, "When we speak of subgroups of languages, it is possible to speak of *higher level subgroups* and *lower level subgroups*" (170). He also states, "If we say that two languages belong in the same subgroup, we imply that they have gone through a period of common descent, and that they did not diverge until a later stage in their development" (167). Dyen's lexicostatistic results suggest that the homeland of the Proto Austronesian language is in Melanesia based on his lexicostatistical results. On the other hand, other scholars including Dahl and Blust argue that the Taiwan is the first split of Proto Austronesian. Blust states, "Both phonological and grammatical evidence supports a Formosan: Malayo-Polynesian dichotomy" ("Summary" 47). According to Blust, "At least nine primary subgroups of the An language family appear to be represented among the extant and extinct languages of Taiwan" ("Subgrouping" 53). In other words, Blust claims there are at least nine subgroups composed of nine individual languages within the Formosan branch (languages branching off from the highest node into nine or so subgroups) based on the fact that those

languages "show no positive evidence of exclusively shared innovations by which they could be joined with other languages under a subordinate node within the An family tree" ("Subgrouping" 53).

From a historical linguistic perspective, evidence from the comparative method mainly based on exclusively shared innovations concludes that the homeland of the Austronesian language family is located in Taiwan with nine or more primary branches of the Austronesian family found on the island. In other words, contemporary historical linguists would support Blust's idea over Dyen's claim that the homeland is somewhere in Melanesia based on comparatively undependable data such as lexicostatistics. Both linguistic and archeological records suggest that the original settlements of the Proto Austronesian language speakers were first on the coastline of Taiwan; then expanded to the interior regions, "effectively ringing the island with a population still speaking dialects of a single language" ("Subgrouping" 53). Gradual occupation of the coastline as well as the mountain areas by Austronesian language speakers took significant time, thus contributing to diversifying the proto languages into different languages within the Formosan subgroup. This suggests that the split of the Malayo-Polynesian branch took place long after the Formosan languages were established.

According to Blust (Personal Interview. 13 Sept. 2002), evidence for Neolithic culture exists for about 6,000 BP in Taiwan, 4,800 BP in the Northern Philippines, and in 3,600 BP in Western Melanesia. The archaeological evidence thus supports Blust's model of branching among Austronesian languages over Dyen's analysis based on lexicostatistics.

3.5. WESTERN MALAYO-POLYNESIAN

Note that in Blust's model in (6), the Western Malayo-Polynesian subgroup includes the languages spoken in the Philippines and western Indonesia and contains more than one subgroup. Ross explains, "all Austronesian languages outside Taiwan belong to a single subgroup, dubbed Malayo-Polynesian by Blust (1977)" (19). He also states, "There was... not 'Proto Formosan': the only ancestor which all Formosan languages have in common in PAn is PAn," and "there was... no 'Proto Western Malayo-Polynesian" (18). In any case, according to Ross, Western Malayo-Polynesian does not show strong evidence of its own proto language under this subgrouping (19). For example, the prefixes *mang- and *pang- (the transitive verbal and nominal markers respectively) may be used to categorize this subgroup. There is, however, no evidence to support these markers as exclusively shared innovations rather than retentions inherited from a common ancestor. Because of this, we cannot justify the Western Malayo-Polynesian group as an independent subgroup composed of closely related languages.

4.0. PROBLEMS IN LEXICOSTATISTICS

4.1. SHARED INNOVATIONS AND RETENTIONS

Blust asks, "Why should such different results be obtained in subgrouping languages by lexicostatistics [Dyen in (5)] and by the use of exclusively shared innovations [Blust in (6)]?" ("Lexicostatistics" 314). Then, he answers, "lexicostatistics counts innovations and retentions indiscriminately, while it is a fundamental tenet of the Comparative Method that they must be distinguished" (314). A crucial error with lexicostatistics, obviously, lies in the fundamental data sets upon which the whole argument is based—in other words, its justification for the Austronesian subgrouping. That is, lexicostatistical evidence depends entirely on exclusively shared vocabulary which may include both retentions and innovations.

Similarities between languages can be explained as being due to either shared retention from the proto-language, or shared innovations since the time of the proto-language (Crowley 167). There is indeed a crucial difference between innovations and retentions when forming subgroups. If some languages are similar because they share characteristics that have been retained from the proto-language, such retentions cannot be used as evidence that these languages have gone through a period of extensive common descent. Such retentions of specific characteristics cannot be used in subgrouping, since a large number of characteristics from the proto-language are expected to be retained anyway. This point will be further discussed later in this paper (under 3.3)[2].

Thus, it should be exclusively shared innovations between languages that can prove that those languages belong in the same subgroup, since exactly the same change is unlikely to occur independently in

different languages unless the changes are due to parallel development or are universally predictable. Crowley gives the following points on determining exclusively shared innovations when classifying languages into subgroups (169).

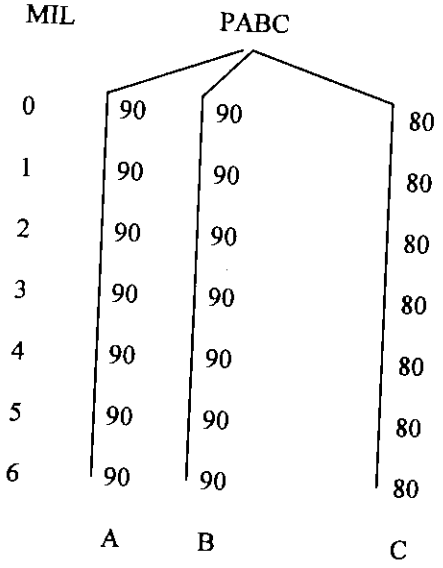
(7) Likely causes of linguistic change as a result of exclusively shared innovation
a. Changes that are particularly unusual.
b. Sets of several phonological changes, especially unusual changes which would not ordinarily be expected to have taken place together.
c. Phonological changes which correspond to unconnected grammatical or semantic changes.

Only the Comparative Method uses exclusively shared innovations for evidence of subgrouping; thus, this analysis is more dependable when making general accounts of subgrouping than lexicostatistical analysis.

4.2. DISTORTIONS OF LEXICOSTATISTICS

The crucial weakness in lexicostatistics pointed out by Blust is that this model makes no reference to absolute time-depth ("Lexicostatistics" 315 ff). For example, suppose ProtoABC separated into languages A, B, and C, and lines A and B retain 90% of the BV at the end of the first millennium (MIL 1), then 90% of the composite result at the end of the second millennium, and so forth. At the same time, line C retains only 80% over the same time intervals. At the end of MIL 1, the result will be that A and B share 90% x 90% = 81% of BV while C will only share 90x 80% =72% of BV with both A and B. These changes can be schematized in the following figure (8).

(8) Model of distortion in subgrouping for A, B, and C



A:B (.81)	A:C (.72)	B:C (.72)
A:B (.66)	A:C (.52)	B:C (.52)
A:B (.53)	A:C (.37)	B:C (.37)
A:B (.43)	A:C (.27)	B:C (.27)
A:B (.35)	A:C (.19)	B:C (.19)
A:B (.28)	A:C (.14)	B:C (.14)

Blust points out the possible "false conclusion," from the above lexicostatistical calculation which is based entirely on shared retention. He states, "these percentages at face value as subgrouping evidence" can produce "a tree with a historically non-existent Proto-AB node" ("Lexicostatistics" 315). In a similar manner, Blust shows yet another case of a possible "false conclusion" resulting from this type of lexicostatistic analysis regarding the subgroup-splitting problem.

4.3. UNIVERSAL CONSTANT?

Dyen ignores rates of lexical change in his version of the Austronesian subgrouping based on lexicostatistics. Blust identifies the problem of lexicostatistics here with its failure to take into account variations in rates of lexical change. He states,

> In biological taxonomy this type of error is seen in the recognition of an evolutionary category 'ape'. This Linnaean taxon, comprising gibbons, orangutans, gorillas and chimpanzees, wrongly excludes our own species, which has undergone a more spectacular trajectory of evolutionary change over the past four million years since separating from the ancestral Pan-Homo node somewhere between five and seven million years ago. ... The biologist Ernst Mayr (1981) has called such a structurally defective taxonomic category which results from the exclusion of highly innovative (and hence typologically aberrant) members a 'paraphyletic taxon' ("Lexicostatistics" 318).

This problem of lexicostatistics is primarily based on the fact that lexicostatistics ignores the separation time linking the languages, and considers the changes to take place at the same rate for all the languages under the same proto-language ('universal constant').

Later, Dyen ("Borrowing" 483) introduced a similar idea to his lexicostatistics by using exclusively shared vocabulary categorized as "homomeries." Blust disagrees with the use of "homomeries" for subgrouping and states, "this assumption is contradicted by clear evidence that lexical replacement rates may differ significantly among languages ("Subgrouping" 62)." The problem with "homomeries" is essentially the same as with lexicostatistics: it does not take different rates of lexical change into consideration. For example, Tahitian has a name avoidance tradition which contributes to rapid vocabulary replacement compared with the other Polynesian languages. Thus, use of exclusively shared vocabulary has an obvious disadvantage in subgrouping compared with use of comparative methods based on phonological and grammatical linguistic evidence.

5.0. ANOTHER PROBLEM

Apart from the problems directly related to lexicostatistic analysis, there is yet another concern in this method regarding the use of BV. When evaluating cognates among the languages in (possible) subgroups, there are some BV terms that are combined with other morphemes. Such morphologically complex vocabulary was not explained by Swadesh; thus, they remain unclear when dealing with the cognates. For example, if there is a fossilized bound morpheme attached to a BV term in one language but not in another within a possible subgroup, should the polymorphemic word be counted as a cognate or not?

If the morphologically complex words happen to appear in a certain branch within a language family, the morphological process can be counted as evidence for subgrouping. For example in Fijian, hair (of head) is *drau ni ulu-* and it is *lauoho* in Hawaiian. Literally, they both mean 'grass on the head', and these morphological and semantic developments may be evidence for subgrouping (Blust, Robert. Personal Interview. 2 Dec. 2002).

6.0. CONCLUSION

In this paper, I summarized problems of lexicostatistics. First, basic information for BV and cultural vocabulary was presented, followed by a criticism of the original BV for being Eurocentric. Second, the background of lexicostatistics as well as of linguistic subgrouping (Dyen and Blust's models) were discussed. Third, problems about lexicostatistics regarding shared innovations and retentions were mentioned, followed by the topic of lexicostatistical distortions concerning the 'universal constant'. Finally, a problem with morphologically complex words in respect to BV was briefly pointed out.

With regard to rates of lexical change and subgrouping, it is clear that lexicostatistics is not a dependable way to account for either of them. Instead of lexicostatistics (which ignores exclusively shared innovations as subgrouping evidence), theoretically and descriptively dependable methods such as the Comparative Method should be used when studying subgrouping within language family models.

NOTES

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1. Blust (Tuesday seminar, October 1, 2002) argues that the concept of rainbow serpent is not limited to languages of Aboriginal Australia. This notion is rather widely distributed throughout the world.
2. Blust ("Subgrouping" 61) makes clear arguments to explain this point, too.

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OBJECT RAISING AND CLITICIZATION IN SERBO-CROATIAN CHILD LANGUAGE

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ABSTRACT

The so-called 'root infinitive' stage in child language acquisition is commonly described as a stage in which verbs sometimes fail to raise to INFL and check tense/agreement features. Hyams (1996) accounts for this phenomenon by arguing that finiteness, or temporal specificity in children's root clauses, is underspecified and thus verb raising is optional. Noticing the parallel between the verbal and the nominal system, Schaeffer (1997) argues that in addition to temporal specificity, nominal specificity is also underspecified (Schaeffer 1997: 528), thus accounting for a) the optionality of object scrambling in obligatory contexts in early Dutch and b) the frequent omission of determiners in early Dutch. Moreover, Schaeffer introduces "Discourse rule" to account for the fact that specificity is not always grammatically marked in the grammar of 2-year-old Dutch children, with this rule being acquired by age 3 (Schaeffer, 1997: 537). In this paper I present evidence from child Serbo-Croatian which shows that children raise lexical objects and object personal pronouns from the utterance final position to the utterance medial or initial position, which are positions associated with specificity. I thus argue that children both have and apply their knowledge of specificity. I also show that object personal pronouns in the utterance-medial position appear correctly as clitics, which are unfocused counterparts of full pronouns, thus showing evidence of knowledge of the discourse rule that interacts with the principle of specificity.

1.0. INTRODUCTION.

The "Optional Infinitive stage" (Wexler 1994), or 'root infinitive' stage, is a phenomenon widely attested in the early acquisition of many languages, such as Dutch (Weverink 1989) and French (Pierce 1992). It is commonly described as a stage in which verbs sometimes fail to raise to INFL and check the finite features of tense and agreement. Hyams (1996) accounts for this phenomenon by arguing that finiteness, or *temporal specificity* in children's root clauses, is only optionally marked (in Schaeffer 1995, 1997). Noticing the parallel between the verbal and the nominal system, Schaeffer (1995) argues that a) optionality of object scrambling in obligatory contexts and b) frequent omission of determiners in Dutch child language are the results of optionally marked *nominal specificity*, i.e. underspecification of the functional head D with respect to specificity feature. The analysis of Dutch corpora from CHILDES data-base collected from two Dutch children, Nick (age 2;7 – 3;11) and Laura (age 1;9 – 5;4) show that "scrambling of pronouns is not obligatory for Dutch children as it is for adults" (1995: 525) and that "determiners are often omitted in obligatory context" (1995: 527). Moreover, in her 1997 paper Schaeffer introduces a pragmatic "Discourse rule" to account for the fact that specificity is not always grammatically marked in the grammar of 2-year old Dutch children. However, "at the age of 3 children perform roughly adult-like in this respect" (1997: 537). In this paper I will review Schaeffer's (1995 and 1997) findings in section 1); give the explanation for object raising and cliticization in adult Serbo-Croatian in section 2); in section 3) I describe the same syntactic processes in child Serbo-Croatian, give predictions based on the underspecification hypothesis of the nominal system, and describe methodology used in the analysis in this paper; in section 4) I discuss the results of the analysis of naturalistic data collected from a 3-year-old child speaking Serbo-Croatian, and argue that at 3 years of age the child (i) appropriately raises specific objects (both lexical as well as pronominal); (ii) selects the appropriate form of pronouns (clitics or full pronouns) depending on discourse-specific factors such as focus; and finally, in section 5) I conclude that knowledge of specificity, as well as discourse principles of focus that govern the form of pronouns, is evidenced in early Serbo-Croatian.

1.1. OBJECT SCRAMBLING IN DUTCH ADULT AND CHILD LANGUAGE.

As previously mentioned, in her 1995 paper Schaeffer focuses on object scrambling in Dutch child langauge, informing us that objects in the adult Dutch language can appear in three different positions. Schaeffer, (following Diesing 1992), assumes that specificity is a prerequisite for scrambling. In Dutch sentences containing negation and temporal adverbs, scrambling of specific objects (i.e. definite DPs, including both full nominal and pronominal objects, as well as object clitics) is obligatory. This is illustrated in examples (1) and (2).

(1) Scrambling of definite lexical objects over sentential negation (Schaeffer 1997):

Koekiemonster gaat *de boom* **niet** inkleuren!
Cookiemonster goes the tree not in-color
'Cookiemonster is not going to color the tree.'

*Koekiemonster gaat **niet** *de boom* inkleuren!

(2) Scrambling of pronominal objects over sentential adverbs (Schaeffer 1995):

dat Saskia *het* **waarschijnlijk** niet gelezen heft.
that Saskia it probably not read has
'that Saskia probably has not read it.'

*dat Saskia **waarschijnlijk** *het* niet gelezen heft.

In sentences containing negation, all specific objects scramble. In sentences containing adverbs, srambled specific objects must have an antecedent in the preceding linguistic discourse. In order to define the obligatory context for direct object scrambling in unifying way, Schaeffer focuses primarily on "discourse-related specific" objects. Thus, if an object is coreferred with an antecedent in the preceding discourse, it scrambles obligatorily and is placed before both the sentential negation and the sentential adverb.

In this paper I use data from both Schaeffer (1995) and Schaeffer (1997). From Schaeffer (1995) I have singled out the data collected from only one child, Niek, from his Stage I (age 2;7 – 3;5), since the age of the Serbian child Marko (3;0) falls right in the middle of Niek's Stage I. Table 1. (adapted from Schaeffer 1995: 524) shows the proportion of scrambled (marked by s) and unscrambled (marked by u) "discourse-related specific" object DPs (pronouns and definite nouns marked by a determiner) in the obligatory contexts, namely in sentences containing negation or temporal adverbs. Additionally, it shows the proportion of scrambled and unscrambled determinerless object DPs (i.e. underspecified for the specificity feature). Since definiteness in adult Dutch is obligatorily marked by determiners, all instances in the two rightmost columns are starred, as are all other instances of adult Dutch ungrammaticality in Niek's data displayed in this table. The italicized text is my addition.

TABLE 1. Proportions of scrambled (s) and unscrambled (u) "discourse-related specific" objects based on the naturalistic data (adapted from Schaeffer 1995: 524).

	Pronoun		Definite objects marked by a determiner		Determinerless objects	
			Total 3 (5 %)		*Total *61 (95 %)*	
	s	u	s	u	s	u
Total	15	*6	2	*1	*11	*50
	(71%)	(29%)	(67%)	(33%)	(18%)	(82%)
Negation	4	*2	1	0	*2	*19
	(67%)	(33%)	(100%)	(0%)	(10%)	(90%)
Adverb	11	*4	1	*1	*9	*31
	(69%)	(31%)	(50%)	(50%)	(23%)	(77%)

As shown in Table 1, the largest proportion of full DP objects (95%) is, exactly as predicted in Schaeffer 1995, underspecified for specificity feature (i.e. occurs without a determiner), which is ungrammatical. Furthermore, Table 1. shows that the proportion of unscrambled (i.e. underspecified) object pronouns in obligatory contexts (sentences containing negation or adverbs) is 29 %. The proportion of unscrambled (i.e. underspecified) definite full object DPs in obligatory contexts is 33 %. However, given the very low total number of definite DPs compared to determinerless ones (only 3 occurrences), it is difficult to draw any strong conclusions regarding the knowledge of specificity in early Dutch grammar.

In her 1997 paper Schaeffer extends her report to include the proportion of clitic scrambling "in the scenario designed to elicit a clitic" (1997: 535) in an experiment conducted with 13 Dutch children with the mean age of 3;6 (1997: 534), as well as the proportion of scrambling of personal object pronouns in the

obligatory context (negation). Example (3) illustrates obligatory scrambling of object clitics, while Table 2. summarizes the results from Schaeffer 1997.

(3) Scrambling of object clitics (Schaeffer 1997):

dat Saskia *'t* **niet** gezien heft
that Saskia it not seen has
'that Saskia didn't see it'

*dat Saskia **niet** *'t* gezien heft

TABLE 2. The proportion of scrambled (s) and unscrambled (u) "discourse-related specific" objects and cliticization of personal object pronouns at the age of 2 and 3, based on experimental data (adapted from Schaeffer 1997: 534-535).

Age	Definite object scrambling		Personal object pronoun scrambling		Clitic scrambling	
	s	u	s	u	s	u
2	7 (30%)	16 (70%)	2 (33%)	4 (67%)	the number of tokens not stated (16%)	
3	26 (72%)	10 (28%)	20 (95%)	1 (5%)	the number of tokens not stated (58%)	
Adults	105 (96%)	4 (4%)	12 (100%)	0 (0%)	not stated	

1.2. CONCLUSION FOR DUTCH CHILD LANGUGAGE.

Based on the naturalistic data, Schaeffer (1995) concludes that "the underspecification of the functional head D with respect to specificity can account for a) the fact that object nominals do not always scramble in obligatory contexts [29% of pronouns and 33% of definite full DP objects remain in their original position in Niek's Stage I, mean age 3;0] and b) the fact that many nouns occur without a determiner in the Dutch language [82% again in Niek's Stage I]"(Schaeffer 1997: 531). However, based on the experimental data, Schaeffer (1997) concludes that: "Both object scrambling and object clitic placement are close to adultlike by age 3" (Schaeffer 1997: 535). The proportions for object scrambling in obligatory contexts are 72% for definite DPs, 95% for personal pronouns, and 58% for clitics.

2.0 OBJECT RAISING AND CLITICIZATION IN ADULT SERBO-CROATIAN

Serbo-Croatian is a South-Slavic language with inflectional morphology and subject pro-drop. It has a basic SVO word order which allows substantial variations. However, this often-called "free word order" is subject to a number of pragmatic constraints.

2.1. PLACEMENT OF DIRECT OBJECTS.

Object DPs in Serbo-Croatian can occur in three different positions: utterance-final, utterance-medial, and utterance-initial position. This is illustrated in examples (4) through (6).

Utterance-final position:

(4a) Dete ye uzyahalo **magarca**.
Child.NOM AUX mounted donkey.ACC
'The child mounted **the/a donkey**.'

(4b) Uzyahalo ye dete **magarca**.
Mounted AUX Child.NOM donkey.ACC
'Mounted the child **the/a donkey**.'(lit.)
'The child mounted the/a donkey.'

Utterance-medial position:

(5a) Dete ye **magarca** uzyahalo.
Child.NOM AUX donkey.ACC mounted
'The child **the/*a donkey**' mounted. (lit.)
'The child mounted the donkey.'

(5b) Uzyahalo ye **magarca** dete.
Mounted AUX donkey.ACC Child.NOM
'Mounted **the/*a donkey**' the child.(lit.)
'The child mounted the donkey.'

Utterance-initial position:

(6a) **Magarca** ye dete uzyahalo.
Donkey.ACC AUX child.NOM mounted
'**The/*a donkey** the child mounted.' (lit.)
'The child mounted the donkey.'

(6b) **Magarca** uzyahalo ye dete.
Donkey.ACC mounted AUX child.NOM
'**The/*a donkey** mounted the child.' (lit.)
'The child mounted the donkey.'

Each of these three direct object positions bears certain pragmatic features reflected on the nominal occupying that position. Thus, the utterance final position is reserved for focus, which is the most prominent and the most informative part of a sentence in context (i.e. new information). Since lexical direct objects usually represent new information, utterance-final position is pragmatically the most neutral position in which a newly introduced object may occur (i.e. the unmarked position for a new object). On the other hand, a lexical direct object representing old information may either remain sentence final, or raise[1] to a higher position. When raising occurs, the object is obligatorily specific. Raising may occur to utterance-medial or utterance-initial position, both of which are marked positions for a direct object noun phrase. Utterance-initial position is typically reserved for a discourse topic, i.e. old information. Most commonly, the discourse topic coincides with the subject noun phrase. However, in the appropriate context, i.e. when it represents topic, utterance-initial position may be occupied by a "discourse-old" direct object noun phrase. What is common for raising to both utterance-medial and utterance-initial position is the fact that, in order to raise, an object has to be specific. Because the difference between these two raised positions is not relevant to this paper, I make no distinction between them, but instead treat them both as raised positions requiring specific objects. Thus Serbo-Croatian has two positions for objects: postverbal (which does not require specificity) and raised (which does require specificity). Table 3. illustrates the correlation between specificity of a direct object DP, its markedness (i.e. discourse function), and its position.

TABLE 3. Correlation between specificity, markedness and placement of lexical direct objects.

Direct Object Position	Specificity	Markedness
Unraised (utterance-final position)	Specific or non-specific	Unmarked
Raised (utterance-medial and initial position)	Specific	Marked

In sum, raising of a specific lexical object is:

a) Motivated by the information structure (flow of new vs. old information, and emphasis).
b) Only possible when the object is specific.

2.2. OBJECT PERSONAL PRONOUNS.

Since personal pronouns are inherently specific, they obligatorily raise in Serbo-Croatian unless focused, in which case they remain in the utterance final position (Stojanovic, 1997). There are two kinds of pronouns in Serbo-Croatian: full pronouns, which are emphatic and therefore marked, and clitic pronouns, which are non-emphatic and therefore unmarked. As non-emphatic, clitic pronouns are used whenever their

antecedent is the most salient one in the discourse (Godjevac, 2000). Therefore, pronominal clitics are not allowed in utterance final position, which is a position reserved for the focus constituent, i.e. the most informative constituent of the utterance. Instead, they obligatorily raise and attach to the preceding element, and therefore typically occur in the utterance-second position (Stojanovic, 1997). Examples (7) and (8) contrast clitic pronoun in utterance-second position, and full pronoun in utterance-medial position. In sum, clitic pronouns are specific, unmarked and obligatorily raised to the utterance-second position, while full pronouns are specific, marked and, if non-raised, additionally focused.

(7) Cliticized object personal pronoun:

Dete **ga** ye uzyahalo.
Child.NOM him.CL AUX mounted.
'The child mounted it.'

(8) Full object personal pronoun:

Dete ye **nyega** uzyahalo.
Child.NOM AUX him.ACC mounted.
'The child mounted it.'

Table 4. summarizes the correlation between the form, position and markedness (i.e. discourse function) of personal pronouns in Serbo-Croatian.

TABLE 4. Distribution of full pronouns and clitic pronouns with respect to utterance position and its discourse function

Object Personal Pronoun Position	**Marked**	**Unmarked**
Unraised (utterance-final position)	full pronoun (focus)	/
Raised (utterance-medial position)	full pronoun	clitic pronoun
Raised (utterance-initial position)	full pronoun	/

In sum:

a) Raising of a personal pronoun is obligatory (unless focused).
b) A clitic pronoun cannot be focused, and therefore is obligatorily raised.
c) A clitic pronoun can occur only utterance-medially, attached to a preceding element.

3.0. OBJECT RAISING AND CLITICIZATION IN SERBO-CROATIAN CHILD LANGAUGE – PREDICTIONS, METHODOLOGY, AND RESULTS.

3.1. PREDICTIONS.

As illustrated in the above examples, object raising in Serbo-Croatian yields quite a number of word order variations. Schaeffer (1995) makes following prediction: "assuming that it is the notion of specificity that is responsible for scrambling [object raising], as Diesing (1992) argues, we expect that in the cases in which specificity is underspecified, children will not scramble objects" (Schaeffer 1995: 521). Thus, if the specificity feature is underspecified in the early Serbo-Croatian grammar, we can predict the following:

a) Raising of lexical objects will occur infrequently, and without any correlation to the specificity of the object.
b) Raising of personal pronouns will occur only optionally.
c) Clitic pronouns will occur in non-allowed positions (i.e. utterance-finally or utterance-initially).

3.2. METHODOLOGY.

In order to test the above predictions I analyzed data collected from the naturalistic speech of a three-year-old monolingual speaker of Serbo-Croatian, Marko. The number of admitted utterances containing lexical objects and object personal pronouns was 120. I counted the number of occurrences of lexical objects (94 tokens) vs. object personal pronouns (36 tokens), and classified and counted them according to their position in the utterance. Finally, I analyzed the correlation between utterance position, specificity and discourse function of the lexical objects, and the correlation between utterance position, form, and discourse function of the object personal pronouns. Specificity was determined on the basis of linguistic context.

3.3. RESULTS.

3.3.1. LEXICAL DIRECT OBJECTS.

Table 5. summarizes the results of my analysis, showing correlation between the position and specificity of lexical direct objects in child Serbo-Croatian.

TABLE 5. Lexical direct object raising and specificity in child Serbo-Croatian.

Lexical Direct Objects (94)	**Specific**	**Non-specific**
Unraised utterance-final objects 79 (84%)	64 (81%)	15 (19%)
Raised utterance-medial and initial objects **15 (16%)**	**15 (100%)**	**0 (0%)**

The results of my analysis show that:

a) Of the 94 lexical objects, 79 (84%) occur in sentence-final position, which is the preferred position for lexical objects.
b) Of the 15 raised lexical objects, all 15 (100%) are specific (i.e. all of them are already mentioned in the preceding linguistic context).

3.3.2. DIRECT OBJECT PERSONAL PRONOUNS.

Table 6. summarizes the results of object personal pronoun raising and cliticization in the early grammar of Serbo-Croatian.

TABLE 6. Raising and cliticization of direct object personal pronouns in child Serbo-Croatian.

Direct Object Personal Pronouns (36)	**Full Pronouns (emphatic) 2 (6%)**	**Clitic Pronouns (non-emphatic) 34 (94%)**
Unraised utterance-final personal pronouns 2 (6%)	0	*2 (6%)
Raised utterance-medial personal pronouns **34 (94%)**	2 (6%)	**32 (94%)**
Raised utterance-initial personal pronouns 0 (0%)	0	0

The results given in Table 4. show the following:

a) Of the total 36 object personal pronouns, 34 (94%) are clitics, i.e. non-emphatic and therefore more natural than full pronouns.
b) Of the 36 object personal pronouns total, 34 (94%) are appropriately raised.
c) Of the 34 raised object personal pronouns total, 94% are correctly cliticized. The remaining 2 raised pronouns are clearly emphatic, and thus clitic form would be inappropriate.

4.0. DISCUSSION.

4.1. OBJECT PERSONAL PRONOUN RAISING AND CLITICIZATION IN CHILD LANGAUGE:

The two most frequent object movements in the data are a) object clitic pronoun raising to the utterance-second position and b) the raising of lexical objects to the utterance-initial position. The object clitics most frequently occur in complement clauses (62%), in which they appeared in the second position, attached to the complementizer da 'that'. This is illustrated by example (9).

(9) Correct use of objectival clitic personal pronoun in the finite complement clause[2]:

A	gde	(pro_i)	mogu	da	**ga**	(pro_i)	zalepim?
and	where	(pro)	may	that	him.CL.ACC	(pro)	glue

'Where may I glue it?'

The remaining 38% instances of the object clitic personal pronouns occurred in simple clauses, in which they appear in the utterance-second position, attached to the utterance-initial element (there are no restrictions on the type of element which may appear utterance-initially in the adult language).

10) Correct use of objectival clitic personal pronoun in the simple clause:

Ti	ga	nosi!
you	him.CL.ACC	carry.IMP

'You carry it!'

Production of the type of utterances exemplified in (9) and (10) is rather complex in that it involves choosing the appropriate discourse function (focused or emphatic vs. non-emphatic), matching it with the correct form of the pronoun (full pronoun vs. clitic), and finally matching those with the correct utterance position (final, medial, or initial vs. utterance-second position). Still, the child produced only two errors, both of them instances of utterance-final unraised clitic pronouns, as exemplified in (11).

(11) Incorrect use of clitic personal pronoun:

*I	onda	kad	ye	(pro)	teo	da	____	pobedi	**ga**...
And	then	when	AUX	(pro)	wanted	that	____	beat	him.CL.ACC

'And then when he tried to beat him...'

Even though the use of the clitic pronoun in example (11) is incorrect, it still shows that the child chose the appropriate discourse function for the particular context in question (namely, non-emphatic), and matched it with the correct form expressing that function (namely, a clitic), and only failed to raise it to the correct position.

While examples (9) through (11) illustrate that the child applies a common strategy of using a non-prominence bearing element to withdraw attention from a non-informative constituent of the utterance, example (12) represents the purposeful use of the full pronoun form utterance-medially, in order to place more emphasis on its referent, but still without making it a focus of the utterance.

(12) Emphatic full pronoun utterance medially:

Onda	ye	**on**	**nyu**	doveo	do	ovog	chiku.
Then	AUX	he	her.	brought	to	this	uncle

'Then HE brought HER to this uncle.'

Interestingly, the correct use of the emphatic full pronoun in (12) is accompanied by the use of the overt emphatic subject replacing the expected non-emphatic null subject (Serbo-Croatian is a pro-drop language). This fact gives further support to my claim that the child purposefully applies his knowledge of discourse principles in order to "guide the interlocutor to the right set of assumptions desired to be shared" (Godjevac, 2000: 12).

4.2. LEXICAL DIRECT OBJECT RAISING.

Of the 15 instances of raised lexical direct objects, 14 occur utterance-initially, 11 of them as a response to a clarification question. Example (13) illustrates the typical context in which the child uses the strategy of placing a specific lexical object in the marked position, i.e. a position in which direct objects do not typically occur (utterance-initial), in order to draw the interlocutor's attention to it.

(13) Specific utterance initial object as a response to a clarification request:

Res: I shta ye bilo dalye?
And what happened next?
Chi: I onda ye upalio **svetlo.**
And then he turned on the light.
Res: Shta ye upalio?
What did he turn on?
Chi: **Svetlo** ye upalio.
Light he turned on. (lit.)

Even though those 11 utterance-initial occurrences of lexical direct objects were produced spontaneously, they occurred as answers to questions eliciting direct object nominals. Still, they evidence that the child is aware of the degree of emphasis associated with the placement of direct objects in particular utterance positions and applies his knowledge accordingly. However, of 11 utterance-initial lexical object occurrences, 3 were not answers to questions eliciting direct object. Example (14) illustrates a spontaneously produced utterance-initial lexical object. The context for this occurrence is following: the child and the researcher are discussing the story "Three little pigs."

(14) Spontaneously produced specific utterance-initial object:

Res: Zar ti niye zao zeke?
Don't you feel pity for the bunny?
Chi: Vuk ye pobedio... **Zekoga** ye pobedio vuk.
The wolf won... **The bunny** was beaten by the wolf.

Even though asked if he wasn't feeling sorry for the bunny, the child opts to answer with a broad sentence focus, informing the researcher that the subject nominal *vuk* 'the wolf', who also happens to be the child's favorite character in the story, is the winner. In order to further stress the reason of his preference, the child places the subject nominal *vuk* 'the wolf' in the final position of the following transitive utterance, thus making it focal. Since the utterance-final position is now occupied by a new focus constituent, the specific lexical object *zekoga* 'the bunny' is appropriately positioned utterance-initially, in the position reserved for constituents conveying old information.

5.0. CONCLUSION.

The results of this study show that the three-year-old Serbo-Croatian child:

a) Appropriately raises specific objects (both lexical and pronominal).
b) Selects the appropriate form of pronouns (clitics or full pronouns) depending on discourse-specific factors such as focus.

None of the predictions made in the section 3.1, based on the Schaeffer's hypothesis of underspecification of the specificity feature in the nominal system, hold for early grammar of Serbo-Croatian. Thus I conclude that knowledge of specificity, as well as of the discourse principles that govern the choice of the appropriate pronominal form, is evidenced in early Serbo-Croatian. This conclusion about the early acquisition of discourse principles is in accordance with Schaeffer's (1997) evidence from Dutch child language, showing that the development of two specificity related syntactic rules, namely object scrambling over sentential negation and sentential adverbs, as well as pronominal object cliticization, are due to the acquisition of a rule in the pragmatic system, namely the "Discourse Rule" stating that "preceding linguistic discourse and knowledge of interlocutor must be taken into account" (Schaeffer 1997: 537).

NOTES

1. I use raising as a cover term for any kind of leftward movement of direct object noun phrases. Raising in Serbo-Croatian is not case-driven, which is evidenced by its optionality, but motivated by the information structure.
2. Henceforth all the examples are taken from data collected from my informant Marko. I have corrected their phonological form where necessary to make the syntactic part more comprehensible.

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PIDGINIZED VARIETY OF JAPANESE IN YOKOHAMA: CAN WE LABEL IT AS PIDGIN?

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ABSTRACT

A pidginized variety of Japanese (PJY) evolved around 1870 and largely disappeared by the end of the nineteenth century (Holm 1989: 593). I describe the sociohistorical background and linguistic features of PJY based on the data provided by a 40-page pedagogical guide (Atkinson 1879). I examine whether we can label PJY as a 'pidgin' based on the common characteristics of restricted pidgins discussed in Sebba (1997) and Siegel (forthcoming). PJY was produced by contact between Japanese and foreigners (from China, America and Europe) in the Yokohama area. PJY had 7 features out of 8 grammatical features that are shared by most restricted pidgins demonstrated in Siegel (forthcoming-a): 1) virtually no productive bound morphology, 2) reduced number of adpositions, pronouns, 3) reduced lexicon, 4) no TMA markers—temporal adverbs used, 6) no complementizers, 7) more reduplicated forms (but reduplication not productive), 8) some bimorphemic question words. Feature 5, a preverbal negative marker, is not observed in PJY, for the negative marker in PJY is postverbal as in the superstrate language, Japanese. Sebba (1997) pointed out the correlation between SVO word order and preverbal negation markers in the majority of known pidgins. In the case of PJY which has SOV word order, it would be expected to have a postverbal negator in terms of universal tendencies. In conclusion, this study shows that PJY is a variety that we can label a 'restricted pidgin' in terms of sociohistorical background and linguistic features as well as its stability as a variety.

1.0. INTRODUCTION

A pidginized variety of Japanese called *Yokohamese* or *Japanese Ports Lingo* evolved during the reign of Emperor Meiji from 1868 to 1912, and largely disappeared by the end of the nineteenth century (Holm 1989: 593). Hereafter this variety is referred to as Pidginized Japanese in Yokohama, or PJY. In this paper, I will describe the sociohistorical background and linguistic features of PJY. Then I will examine whether PJY can be labeled an 'restricted pidgin' based on the common characteristics of restricted pidgins discussed in Siegel (forthcoming-a) and Sebba (1997).

2.0. SOCIOHISTORICAL BACKGROUND

The pidginized Japanese in Yokohama was produced by the contacts between Japanese and foreigners from abroad particularly in the Yokohama area at the time of the Meiji opening of Japan to the West (Miller 1967: 266). According to a study on the formation of Yokohama Settlement (Ishizuka 1996), Yokohama developed as an international trade city and a port town of the capital, Tokyo, and served an important role in monopolistic exporting of raw silk. The Tokugawa Shogunate (later on the Meiji government) allowed foreigners to borrow land, build buildings, and do businesses only within the Gaikokujin-Kyoryuuchi (Foreigners' Settlement) for 40 years from the opening of Yokohama port in 1859 until 1899. The Settlement was about 108 hectares in area. In 1860, six months after the opening of the Yokohama port, only 44 foreigners (mainly English and Americans) were living in the settlement. In 18 years, the number of Europeans increased to 1,370. This meant that combined with 1,850 Chinese, more than 3,000 foreigners were living in the settlement by 1878. In terms of nationality, the British were the most representative followed by Americans and Germans. Many of the foreigners were businessmen, doctors, teachers, and missionaries. One-fourth were women who came to Japan as wives or tutors. Table 1 shows the demographic data for foreigners in the Yokohama Settlement from 1870 to 1897.

TABLE 1. The number of foreigners in Yokohama Settlement from 1870 – 1897 (from Ishizuka 1996)

	British	American	German	French	Dutch	Total Europeans	Chinese	Total
1870	513	146	76	83	34	*942		
1878	515	300	175	120	59	1,370	1,850	3,220
1893	808	253	151	133	60	1,605	3,325	4,930
1897	869	372	208	274	40	2,096	2,015	4,111

[* Does not include the number of women.]

As Table 1 demonstrates, the number of Chinese represents a significant proportion in the demographic data. It is assumed that Chinese people played a significant role in the formation of PJY although their role has not been discussed in previous studies. Concerning Chinese traders in the Settlement, Ishizuka (1996) stated that many of them did their business throughout the Pacific including places such as Shanghai, Hong Kong, and Singapore. In an autobiographical essay written by Theodate Geoffrey (Geoffrey 1926: 7), who arrived in the Settlement in 1917, there is an anecdote about a Chinese nursemaid who spoke "pidgin English." The Chinese nursemaid greeted the author, "How do, missy. You b'long ship side long time; you velly tired?" when she first met her. Two features of Chinese Pidgin English (CPE) are observed in this short discourse. They are the use of *belong* as copula and the zero copula. According to Baker (1987: 183), the *belong* copula is an exclusively CPE feature and one which reflects Cantonese influence. As for the zero copula, it is one of the frequently found features in many other pidgins and creoles (Baker 1987: 177). Taking these into consideration, it is very probable that Chinese people in the Settlement had used some CPE. Geoffrey (1926) also tells us that social interaction between foreigners and Japanese was limited to certain settings such as business negotiations and interaction with servants.

Niki (2001) revealed the social psychological attitudes of the English speakers toward PJY by introducing articles in two major newspapers of those days for the English speakers in Yokohama settlement. Niki's discussion tells us about people with two opposing attitudes toward PJY—those who designated PJY as corrupted and vulgar, and those who believed in its usefulness. In the review article in *The Japan Gazette* for the other orthodox textbook of Standard Japanese 'Kwaiwa Hen, Twenty-Five Exercises in the Yedo Colloquial' edited by Ernest M. Satow, PJY is mentioned as "that odious jargon—the pidgin Japanese of Yokohama." On the other hand, the review article of Atkinson (1879) in *The Japan Weekly Mail* argued that PJY is very helpful for learners of Japanese as a foreign language and emphasized that the pedagogical guide is not for the small number of elites but for the public, and applauded the anonymous author as one "whom fame will soon lead forth to crown with public honours."

3.0. LINGUISTIC DESCRIPTION OF PIDGINIZED JAPANESE IN YOKOHAMA

3.1. DATA

The data is a word list and a set of example sentences from the small pedagogical guide for the learners of PJY: *Revised and Enlarged Edition of Exercises in the Yokohama Dialect* (Atkinson 1879, hereafter referred to as '*Exercises*'). This small 40-page pamphlet was published anonymously, and the author later turned out to be a merchant who engaged in commerce both in China and Japan. Although the amount of data contained in Atkinson (1879) is not comprehensive, as the author stated in the preface, it is enough to provide some idea of the lexicon and grammatical structure. Since PJY is represented orthographically with English words (and pseudo-words), two separate words were sometimes used to transcribe a word (in PJY). A good example is ***cheese eye***, an adjective meaning 'little.' Apparently ***cheese eye*** derived from a Japanese adjective ***chiisai*** (little, small). In this paper, I will use a hyphen to combine words such as ***cheese-eye*** for the reader's convenience.

3.2. PHONOLOGY

As Holm (1989) points out, PJY generally retained the CV syllabic structure of Japanese. Since PJY is mostly transcribed with a series of small English words that sound similar to the target Japanese words, it is difficult to see phonological features in light of how and to what extent PJY had phonological features in common with Japanese. Yet it is assumed that they were pronounced with English phonology on the basis of the English words.

There is one interesting phonological aspect to point out about PJY: how it reflects the characteristic feature of the Tokyo dialect spoken in those days. Unlike dialects of Japanese spoken in other areas, the Tokyo dialect used to have a salient phonological feature: they pronounced as /s/ which was pronounced in other dialects as /h/[1]. ***Sto/shto*** (***hito*** in other dialects) meaning 'human being', ***stoats*** (***hitotsu*** in other dialects) meaning 'one,' and ***stats*** (***futatsu*** in other dialects) meaning 'two' are good examples. These features are becoming lost and only older speakers have this feature currently.

3.3. LEXICON

The lexicon of PJY seems to be highly reduced. There are many cases where limited vocabulary was made use of to express various things and situations. For example, ***daijoubu*** in Japanese is usually used to describe a situation where no problems or dangers are involved. ***Die-job*** in PJY, however, was used to depict 'being good' as in ***die-job boto*** 'a good sea boat', or 'being sound' as in ***die-job mar*** 'a sound horse.' Another example is the polysemy of the word ***aboorah***. While ***abura*** in Japanese only designates 'oil', ***aboorah*** in PJY refers to 'butter', 'oil', 'kerosene', 'pomatum' and 'grease.' ***Aboorah*** in PJY is a good example of semantic extension as is frequently observed in pidgins. As Sebba (1997) explained, since pidgins need to place as small as possible a burden on their learners, the list of words should be as small as the function of the language will allow, and therefore, there will be a need to make the best use of the word-resources.

As Holm (1989: 594) pointed out, PJY contained words from a variety of languages such as ***boto*** 'boat' (> English *boat*), ***piggy*** 'go' (> Bazaar Malay *pergi*), though the lexicon of PJY mainly derived from Japanese, the superstrate language. Atkinson (1879: 21) referred to the origin of the two words ***chobber chobber*** 'food, sustenance', and ***bobbery*** 'disturbance, noise' to "pigeon English—a low and ungrammatical dialect, void of syntax—spoken between foreigners and Chinese." Some words reflected loanwords from other European languages which had already been introduced by the time PJY was evolved, such as ***shabone*** 'soap' (> French *savon*). Holm also states that some English derived words such as ***nun-wun*** 'the best' (> English *number one*) came from English via Chinese Pidgin English.

Some words in PJY have a pragmatic origin. For example, a word for 'a dog' is ***come-here***. It is not difficult to assume that Japanese people misunderstood the expression 'Come here!' that is often said to dogs, as the generic term of the creature. Another example is ***high-high-mar*** for 'racing pony.' ***Hai-hai*** is a typical interjection used when a rider hastens a horse in Japanese. These PJY words are not similar to the Japanese words.

(1)	***PJY:***	***come-here,***	***high-high-mar***
		'dog'	'racing pony'
	J:	***inu***	***kyousouba***

There are several reduplicated forms in the data that do not originate from Japanese in the data. For example, ***so-so*** for the verb 'sew', ***maro-maro*** for 'to pass, to walk, to be not at home', and ***sick-sick*** for 'sick.' ***So-so*** and ***sick-sick*** are apparently from English 'sew' and 'sick' respectively for Japanese words for these words ***nuu*** and ***byoukida*** are not phonologically similar to them. Reduplication in PJY is not a productive morphological process, nor does it have any grammatical functions.

3.4. MORPHOLOGY

PJY generally lacks any productive bound morphology. There is one frequently observed compounding strategy with ***sto/shto*** 'person'. ***Sto/shto*** is added to any part of speech to describe and make the terms for professions.

(2)	***PJY:***	***yakkamash shto,***	***ah-kye kimono sto[2],***	***eeto high-kin sto***
		noisy(A) person	red clothes(N) person	thread look(V) person
		'ambassador'	'soldier'	'silk inspector'
	J:	***taishi***	***heitai***	***kinukensakan***

Long words that consist of several components are sometimes observed in PJY, and it is not very easy to determine the meaning of the meaning of the words from the component morphemes. For example, the word for 'light house', ***fooney high-kin serampan nigh rosokoo*** is not easily understood at first glance, though it makes sense after a while.

(3)	***PJY:***	***fooney***	***high-kin***	***serampan***	***nigh***	***rosoko***
		ship 'lighthouse'	look	break	NEG	candle
	J:	***toudai***				'lighthouse'

3.5. GRAMMAR

3.5.1. ARTICLES

There were no articles which exist in PJY just as there are none in Japanese (Atkinson 1879: 15).

3.5.2. PRONOUNS

Subject pronouns in PJY distinguish three persons (1st, 2nd, and 3rd) but there is no distinction in number. No example of object pronouns is observed in *Exercises.*

TABLE 2. Pronouns in PJY

1st person	***watarkshee***
2nd person	***oh-my***
3rd person	***acheera sto***

The first person singular pronoun is sometimes dropped as in the case in Japanese.

(4)	***PJY:***	***(Ø)***	***Boto***	***high-kin***	***arimas.***
			boat	see	PLT
					'I see the boat.'
	J:	***(Ø)***	***Booto-ga***	***mie-masu.***	
			boat-NOM	see-PLT	
					'I see the boat.'

3.5.3. CASE MARKING

All of the case markers found in Japanese were dropped.

(5)	***PJY:***	***Kooromar***	***aboorah***	***sinjoe.***	
		car	oil	give	
					'Oil the carriage wheels'
	J:	***Kuruma-ni***	***abura-o***	***ire-ro.***	
		car-DAT	oil-ACC	put-IMP	
					'Put some oil into the car.'

3.5.4. POSSESSION

No lexical item is used for possession in PJY. Possessive relationship between two noun phrases is expressed simply by juxtaposition of the possessor (including pronouns) and the possessed.

(6)	***PJY:***	***acheera***	***sto***	***caberra-mono***	
		over-there	person	hat	
					'his hat'
	J:	***achira-no***	***hito-no***	***kaburi-mono***	
		over there-GEN	person-GEN	hat	
					'that person's hat'

(7)	***PJY:***	***watarkshee***	***mar***	
		I	horse	
				'my horse'
	J:	***watakushi-no***	***uma***	
		I-GEN	horse	
				'my horse'

Possession in Japanese is marked with the genitive case particle ***–no*** in the order of [possessor ***-no*** possessee]. Therefore, word order in PJY is the same as Japanese except for the lack of the case marker ***–no***.

3.5.5. WORD ORDER

PJY retained basic word order of Japanese, SOV. Direct and indirect objects always precede verbs both in PJY and Japanese.

(8) ***PJY:*** ***Mar*** ***chobber-chobber*** ***sinjoe.***
horse food give 'Give the horse some feed.'

J: ***Uma-ni*** ***esa-o*** ***yare.***
horse-DAT feed-ACC give-IMP 'Give the horse some feed.'

3.5.6. TENSE

There are no tense/aspectual markers in PJY. As (9)–(11) show, there is no tense marking expression even though the English translations refer to the event in the past or in the future. In these cases, time is expressed by the context or by temporal adverbs such as ***meonitchi*** 'tomorrow,' ***bynebai*** 'later.'

(9) [Past time is expressed by context.]
PJY: ***Nanny*** ***sto*** ***arimas,*** ***watarkshee*** ***arimasen?***
what person be I be-NEG
'Who called when I was out?'

J: ***Watakushi-ga*** ***i-nai*** ***aida-ni*** ***dareka-kara*** ***denwa-ga***
I-NOM be-NEG a while-DAT someone-OBL telephone-NOM

ari-mashi-ta-ka?
be-PLT-PST-Q

Because of the lack of a tense marker, it is difficult to understand that (9) refers to the event in the past (that someone called) without the help of a possible context such as "the Master came back home and asked the servant."

(10) [Future time is expressed by the temporal adverb ***meounitchi.***]
PJY: ***Start-here*** ***hanash*** ***meonitchi*** ***maro-maro*** ***tachsan so-so*** ***arimas.***
tailor tell tomorrow walk plenty sew have
'Tell the tailor to come tomorrow and I will have plenty of work for him.'

J: ***Sitateya-ni*** ***ashita*** ***ki-tara*** ***takusan*** ***nuimono-ga***
tailor-DAT tomorrow come-COND plenty sewing-NOM
aru ***to*** ***ie.***
be COMP tell-IMP
'Tell the tailor that if he would come tomorrow, I'll have plenty of sewing for him.'

(11) [Future time is expressed by temporal adverb ***bynebai.***]
PJY: ***Sigh-oh-narrow*** ***dozo*** ***bynebai*** ***moh-skosh*** ***cow***
good-bye please by and by more little buy
'Good-bye and please buy some more (in the future).' [translation mine]

J: ***Sayounara,*** ***douzo*** ***mata*** ***nanika*** ***kat-te*** ***kudasai.***
good-bye please again something buy-CON please
'Good-bye, and please buy something again.'

Bynebai is one of the features commonly attested in both Chinese Pidgin English and Melanesian Pidgin English (Siegel 2000). Considering the fact that there were a lot of Chinese people in the settlement, it may have been brought into PJY via Chinese Pidgin English. Baker and Mühlhäusler (1996) made a list of

first attestations of 106 selected features of Melanesian Pidgin English. The use of *by and by* as preverbal marker as in (11) is also included in the table indicating that it was first attested in Chinese Pidgin English in 1878.

3.5.7. NEGATION

The negator ***nigh*** is used to express negation. ***Nigh*** occurs after verbs as in (12), also following the negation strategy in Japanese.

(12)***PJY:*** ***Oh-my*** ***nangeye*** ***tokey*** ***high-kin*** ***nigh.***
you long time see NEG
'I haven't seen you for a long time.'

J: ***Nagai*** ***aida*** ***anata-to*** ***at-te*** ***(i)-nai.***
long time you-COM see-CON be-NEG

En/in is also used by adding it to the predicate verb (copula) ***arimas*** (as in ***arimas-en***).

(13)***PJY:*** ***Bates*** ***arimasen?***
other be-NEG
'Have you no others?'

J: ***Betsu-no*** ***(mono)-wa*** ***ari-mas-en-ka?***
other-POS thing-TOP be-PLT-NEG-Q
'Do you have others?'

Although *Exercises* explains that the formation of the negative by the addition of ***–en*** or ***–in(g)*** to the end of the verb, ***-en/in(g)*** are added only to the two verbs, ***arimas*** and ***walkarimas***. For both forms, the negation strategy of Japanese reflects the syntactic position of negative markers in PJY.

3.5.8. INTERROGATIVE SENTENCES

Affirmative sentences are turned into interrogative sentences when they are pronounced with raising intonation in PJY. In Japanese, the question particle ***ka*** is added at the end of the sentence to form an interrogative sentence. In both languages, no movement of a constituent is involved.

(14)***PJY:*** ***Oh-cha*** ***arimas?***
tea have
'Have you any tea?'

J: ***Ocha-wa*** ***ari-masu-ka?***
tea-TOP be-PLT-Q
'Is there any tea?'

(15)***PJY:*** ***Oh-char*** ***arimas.***
tea have
'He has had his tea.'

J: ***Ocha-wa*** ***ari-masu.***
tea-TOP be-PLT
'As for tea, I have already got some.'

As for the 'WH-questions', all the question words comes from Japanese (***doko*** 'where', ***nanny*** 'what', ***ikoorah*** 'how much', ***dalley*** 'who'). In Japanese, there is no movement of a constituent associated with the formation of WH-questions, either. WH-question words replace noun phrases at the same position, and the question particle ***ka*** is added at the end of the sentence (Tsujimura 1996: 185). PJY employs the same strategy as Japanese except that the question particle ***ka*** is dropped.

(16) ***PJY:*** ***Num-wun sindoe doko?***
best sailor where
'Where is the Captain?'

J: ***Senchou-wa doko (-desu-ka)?***
captain-TOP where-PLT-Q

Unlike in Japanese, a bimorphemic question word, ***nanny sto*** 'who', was also used as in (16) although PJY had sets of monomorphemic WH-question words which came from Japanese.

(17) ***PJY:*** ***Nanny sto arimas, watarkshee arimasen?***
what person be I be-NEG
'Who called when I was out?'

J: ***watakushi-ga i-nai aida-ni dareka-kara denwa-ga***
I-NOM be-NEG a while-DAT someone-OBL telephone-NOM

ari-mashi-ta-ka?
be-PLT-PST-Q

3.5.9. QUOTATION EXPRESSION

PJY has a stable construction for a quotation expression, particularly quotative imperative forms such as 'Tell someone to do something'. A verb ***hanash*** 'to speak, to tell' is used as a sort of quotation marker to introduce the quotation part. Unlike Japanese, this verb and quotation marker ***hanash*** comes before the quotation. Its construction is different from the equivalent construction in either Japanese or English. In Japanese, the quotation part is introduced by the quotation marker (complementizer) ***–to*** and comes before the verb as in (18) and (19).

(18) ***PJY:*** ***Start-here hanash [meonitchimaro-maro tachsan so-so arimas]*** [bracketing mine]
tailor tell tommorow walk plenty sew have
'Tell the tailor to come tomorrow and I will have plenty of work for him.'

J: ***Sitateya-ni [ashita ki-tara takusan nuimono-ga aru] to ie.***
tailor-DAT tomorrow come-COND plenty sewing-NOM be COMP tell-IMP
'Tell the tailor that if he would come tomorrow that I'll have plenty of sewing for him.'

(19) ***PJY:*** ***Sin-turkey hanash kimono a-row.***
laundryman tell clothes wash
'Tell the laundryman to wash the clothes.'

J: ***Sentakuya-ni youfuku-o arae to ie.***
laundryman-DAT clothes-ACC wash-IMP COMP tell-IMP
'Tell the laundryman to wash the clothes.'

This construction is also different from that of English—a substrate language, in that the word order in the main clause (tell someone) is not followed by VO order but OV as in Japanese.

3.5.10. OTHER COMPLEX STRUCTURES

Aside from the grammatical features described above, the following features were observed: 1) no specific form for a conditional sentence was used in PJY.

(20) ***PJY:*** ***Oh-my pompom bobbery wa-tarkshee pumgutz***
you hammer noise I punish
'If you made much noise hammering, I would punish you.' [translation mine]

J:	***(Omae-ga)***	***yakamashiku***	***tatai-tara***	***korasimeru-zo.***
	You-NOM	noisily	hammar-COND	punish-VOL

'If you made much noise hammering, I would punish you.'

As far as the data in *Exercises* shows, 2) there is no passive structure observed.

3.6. STYLE AND COHERENCE

Another remarkable characteristic in the text of *Exercises* is the constant and frequent use of Japanese honorification. One of the frequently used verbs in PJY, ***high-kin*** came from Japanese verb ***haiken***, which is a humble form meaning 'respectfully look at.' ***Miru***, a more common and basic Japanese verb also meaning 'look, see' was not chosen to serve as basic vocabulary in PJY. Also for the word 'give', ***sinjoe*** (respectfully give) is employed instead of the more basic verb ***yaru***. Polite forms of verbs are also employed.

(21)

PJY:	***arimas,***	***katchimas,***	***yakemas,***	***sinjoe,***
Basic J:	***aru***	***katsu***	***yaku***	***yaru***
	be	win	roast	give

4.0. IS PJY A PIDGIN?

Does PJY share common functional and structural features with other Pidgins? The sociohistorical background of PJY tells us that the function of PJY was restricted to communication in limited settings such as commerce and conversation with servants. Both Japanese and foreigners spoke other languages when they were with their peers. PJY was used only between Japanese and foreigners, but not among foreigners. In the preface of *Exercises*, the author referred to PJY as "a means of communication between the native and foreign resident or visitor." Thus PJY was used only for basic communication among people who did not share a common language. The social environment of PJY seems typical of the use for pidgin language.

Siegel (forthcoming-a) shows eight grammatical features that are shared by most restricted Pidgins, which I will examine in PJY data.

a) virtually no productive bound morphology—inflectional or derivational
b) reduced number of adpositions, pronouns
c) reduced lexicon
d) no TMA markers—temporal adverbs used
e) preverbal negative marker
f) no complementizers
g) more reduplicated forms (but reduplication not productive)
h) some bimorphemic question words

As I discussed in section 2, PJY shares seven features (a, b, c, d, f, g, h) out of eight features. As for e), preverbal negative marker, it is not observed in PJY as the negative markers in PJY are postverbal as in the superstrate language, Japanese. In terms of linguistic features, PJY shares seven out of eight typical pidgin features. Although negative markers occur before the verb in the majority of known pidgins, Sebba (1997: 42) points out there are some exceptions to this, referring to Hiri Motu[3] in which the negator comes after the verb. Sebba provides an explanation of the exceptional case in Hiri Motu, saying that the presence of a preverbal negator might be because of a universal preference among languages with SVO word order for preverbal modification, but it is not the case with languages with SOV word order. Since PJY is also a language with SOV word order, PJY suggests that the preverbal negator correlates with pidgins with SVO word order, and the postverbal negator with pidgins with SVO word order.

We have seen how the sociohistorical background and linguistic features of PJY show typical character of "pidgin" so far. The next question is whether PJY was stable enough to be called a pidgin. The fact that there existed a booklet for learners such as *Exercises* is good evidence that PJY was a very stable variety and was recognized as a communication medium by many people. Also, people's attitudes towards PJY—as illustrated in the review article on the *Exercises* (Atkinson 1879) published by the well established newspaper, *The Japan Weekly Mail*—is another piece of evidence that PJY was recognized as a stable variety.

In conclusion, PJY is a variety that we can label "pidgin" in terms of sociohistorical background, linguistic features, and stability.

5.0. CONCLUSION

The sociohisotrical background and linguistic features of PJY were described in this paper. As discussed in 3, PJY is a variety that we can label "pidgin" in terms of sociohistorical background and linguistic features as well as in terms of its stability as a variety. Some of the PJY lexicon reflects some similarity to English pidgins throughout the Pacific. Atkinson (1879) serves as evidence of early diffusion of CPE. Ways in which PJY was influenced by other Pacific pidgin(s) – such as Chinese Pidgin English – are an important direction for future research.

ABBREVIATION

N	noun	A	adjective	V	verb
NOM	nominative	ACC	accusative	DAT	dative
GEN	genitive	COM	comitative	OBL	oblique
NEG	negative	PLT	polite	Q	question particle
COND	conditional	IMP	imperative	VOL	volitional
PST	past	COMP	complimentizer	CON	connector

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NOTES

1. In Japanese, the phoneme /h/ is realized as [ɸ], [ç], and [h] depending on the following vowel (Tsujimura 1996: 37). The phonetic variations are reflected in the conventionalized romanized representation of Japanese where /h/ is represented as /f/ when followed by the vowel /u/.
2. "The British established a navy base in Yokohama from 1863 to 1875 to defend their settlements, and ... the red uniforms of their soldiers were a common sight in the harbor area..." (Holm 1989: 593).
3. Hiri Motu is a pidgin based on Motu, an Austronesian language. It is spoken around Port Moresby in Papua New Guinea.

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APPENDIX

List of PJY words which appear in this paper and their origins

	PJY words	PJY meanings	original words (Japanese if unmarked)	meanings in original words	equivalent modern Japanese words and other comments
3.1	***cheese eye***	little, small	***chiisai***	small	
3.2	***sto/shto***	person	***hito***	person	
	stoats	one	***hitotsu***	one	
	stats	two	***futatsu***	two	
3.3	***die job***	good, strong, well, unmistakably,	***daijoubu***	unmistakably	
	boto	boat	***>E. boat***		***booto*** 'boat'
	mar	horse	***uma***	horse	
	aboorah	butter, oil, kerosene, pomatum, grease	***abura***	oil	
	piggy	remove, take away, carry off, etc.	***>Bazaar Malay pergi***	go	There is no word to cover the function of ***piggy*** in MJ. cf. ***iku*** 'go'
	chobber chobber	food, sustenance	***CPE***		***tabemono*** 'food'
	bobbery	disturbance, noise	***CPE***		***souon*** 'noise'
	shabone	soap	***>F. savon***	soap	***sekken*** 'soap'
	nun-wun	the best	***>CPE>E. number one***		***itiban*** 'number one' ***saikou*** 'the best'
	come here	dog	***>E. come here***		***inu***'dog'
	high high mar	racing pony	***hai hai***	interjection to hasten a horse	***kyousouba*** 'racing pony'
	maro maro	pass, walk, be not at home	***mawaru***	turn around	No word in MJ. covers this function.
	sick sick	sick, illness	***>E. sick***		***byoukida*** 'sick'
	so so	sew, mend	***>E. sew***		***nuu*** 'sew'
3.4	***yakkamash***	noisy	***yakamashii***	noisy	
	ah kye	red	***akai***	red	
	kimono	clothes	***kimono***	clothes	***youfuku*** 'clothes' in modern Japanese. ***Kimono*** only refers to the traditional outfit.

	eeto	silk	***ito***	thread	***kinu*** 'silk'
	high kin	see	***halken***	respectfully look at	***miru*** 'look' is the plain word MJ.
	fooney	ship	***fune***	ship	
	serampan	break	***?***		***kowasu*** 'break'
	nigh	negator	***-nai***	Negator	
	rosoko	candle	***rousoku***	candle	
3.5.2	***watarkshee***	I	***watakushi***	I	***watashi*** is a more basic pronoun for 'I' in MJ.
	oh-my	you	***omae***	you	
	acheera sto ***acheera*** ***sto***	he	***achira no hito*** ***achira*** ***no*** ***hito***	over there GEN person	***achira no hito*** in MJ. is a phrase referring 'the person (who is) over there.'
	arimas	have, be, obtain, arrive, want	***ari-masu***	be + PLT	***aru*** is the form without politeness marker –***masu***.
3.5.3	***kooromar***	carriage	***kuruma***	car	
	sinjoe	give	***sinjyou***	respectfully give	***yaru***, or ***ageru*** is the basic word for 'give'
3.5.4	***caberra mono***	hat	***>AJ. kaburimono***	headgear	***boushi*** 'hat' in MJ
3.5.6	***meonitchi***	tomorrow	***myounichi***	tomorrow	***asu***, or ***ashita*** is more basic in MJ.
	bynebai	later	***>CPE>E.*** ***by and by***		***atode*** 'later'
	nanny sto ***nanny*** ***sto***	who	 ***nanny*** ***hito***	 what person	***dare*** in MJ.
	arimasen	to be out, not to have	***ari-mas-en***	be + PLT + NEG	
	start-here	tailor	***shitateya***	tailor	
	hanash	speak, say, tell	***hanashu***	speak	***hanasu*** 'speak', or ***iu*** 'tell' in MJ.
	tachsan	plenty	***takusan***	plenty	
	sigh-oh-narrow	good-bye	***sayounara***	good-bye	
	dozo	please	***douzo***	please	
	moh-skosh	a little more	***mou-sukoshi***	a little more	
	cow	buy	***kau***	buy	
3.5.7	***bates***	other	***betsu***	other	
	nangeye	long	***nagai***	long	
	tokey	time	***toki***	time	
	walk-arimas	understand	***wakari-masu***	understand + PLT	
3.5.8	***oh-char***	tea	***o-cha***	tea	***o-*** is a bound prefix that makes nouns polite forms.
	doko	where	***doko***	where	
	nanny	what	***nani***	what	
	ikoorah	how much	***ikura***	how much	
	dalley	who	***dare***	who	
	sindoe	sailor	***sendou***	sailor	
3.5.9	***sin-turkey***	laundryman	***sentaku***	washing	***sentaku-ya*** is the word for laundryman

					in MJ.
	a-row	wash	***arau***	wash	
3.5.10	***pompom***	hammer	***ponpon***	onomatopoeia	
	pumpgutz	punish	***?***		***bassuru*** 'punish'

* E. English, F. French, AJ. Archaic Japanese, MJ. Modern Japanese, CPE Chinese Pidgin English

CREOLE ANTERIOR GENESIS - ONE CONNECTIONIST MODEL

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ABSTRACT

This paper summarizes an experiment that modeled the genesis of the Hawai'i Creole English tense-mood-aspect [+past] structure within the framework of Neural Networks. We present a program written with 'tlearn' software analogous to creole genesis. It couples semantic and phonologic input as they occur in the natural linguistic environment. The program cycles through that data, learning patterns and incrementally changing its output in a desired direction (the natural linguistic environment forms). We will look at a selection of seven suspect predicates conjugated for [+past] TMA. Contact language theory issues the challenge to make a sufficient account of how these structures come about. The historic formation of the [+past] construction emerged from synchronically conflicting forms. Two or more grammatical entities conflict when at an accessible level of semantic constitution, they are identical, however, in phonologic substance the set is heterogenous. We responded to the challenge by designing a connectionist model experiment that mimics the processes of the human brain, simulates a plausible data set for the program to digest, and lets the architecture bristle into the input.

Situated in a problem area of contact language studies, this paper necessarily references cognitive linguistic and connectionist modeling terminologies. After relevant conditions have been established, we present details of the simulation including output data and some explanation required for understanding the model's capabilities. Following a discussion of the research project findings, we check our prediction that the model, like human young, will use its general cognitive-like processes to negotiate a native language.

1.0. INTRODUCTION

Herein we are interested in discussing a specific contact language phenomenon, Hawai'i Creole English [+past] genesis, which owes its existence to and is inextricably bound with social and cultural circumstances. For the sake of our task, I will use [+past] to encompass [+anterior], interchangable with past-before-past. Pitted against the observation that language is tied to circumstance, there occurs to us a common sense realization that language is an individual product-construct that can be studied in terms of generalizations applicable to a collective people's language. Therefore, we have two facets of language – individual and social. The study of one often illuminates the understanding of the other. Our starting point for the research described in this paper is the individual language system. An assumption that our work relies on is unanimity of Homo sapiens to *sapere* - to use the Latin term - be wise, including linguistic savvy. There is no difference of cognitive resource available to a speaker in a monolingual speech community (inevitably with dialectal and individual variation), egalitarian multilingual speech community, or least favorably, a multilingual speech community where speakers of one variety set to subjugating the others.

This paper addresses the multilingual speech community where one group of speakers dominate the other groups, particularly at the point of creole genesis. In the sense that this is a preliminary work, we look at only one element in the creole grammar. Our theoretical viewpoint of the contact phenomenon incorporates connectionism. CONNECTIONIST MODELING (CM) is a theory that reconsiders the presence of 'rules' in individual people's grammar; furthermore, CM proposes that there really are no rules at work when we partake in language activity (MacWhinney 1993, Plunkett & Elman 1997). In their place, the theory postulates that a cognitive device such as 'generalization' is the real phenomenon responsible for the form language assumes.

Our research is geared towards answering the central question: does connectionist modeling provide a feasible solution to problems generated by the advent of creole language systems? Can it answer any of the questions in contact language research? In other words, does this theory accommodate the data we have about creole genesis in ways that, for instance, the Linguistics Bioprogram Hypothesis (Bickerton 1984, which was notably meant as a scientific answer to previous theories) is unable? We strive to answer this question in a number of ways. In the next section we present relevant theory and research within the contact language varieties discipline paired with crucial shortcomings that motivated our current undertaking. In subsequent sections, we introduce CM and present one connectionist model simulation (using 'tlearn' software) of language acquirer's induction of a contact language variety i.e. Hawai'i Creole English. In the conclusion, we discuss our findings before the backdrop of trends in current theory, such as asking: can universal character of the human cognitive system (e.g. the need to have a grammar) be held responsible for creole genesis? In the case of

creole genesis, it is assumed that there is disparity in the linguistic input with which children are surrounded (as fledgling linguistic community members) but consistency in the language that they produce. We predict our model, like human young, will use a cognitive device to negotiate its way into native language.

2.0. CONTACT THEORY

Here in Honolulu, our local vernacular is generally called 'Pidgin' by its speakers, but called Hawai'i Creole English (HCE) by the greater linguistic community. Our study of creole [+past] genesis will use 'Pidgin' data. Romaine (1988) includes specific aspects of tense, mood and aspect as one of twelve features of creole grammars. We think it reasonable that studying this specific language system can indicate the feasibility of applying a similar methodology across a wide sample of contact languages. Focused in terms of the creolization particular to Hawai'i, we adopt the outlook that Hawai'i Pidgin English plus substrates and a superstrate (English) synthesize a creole. Specifically relevant to further work would be the major substrates present at the time of Creole genesis: Hawaiian, Chinese, and Portuguese, then later Japanese, Korean and Filipino. "The major ethnic groups brought to Hawai'i as labor were Chinese, Portuguese, and Japanese. The Chinese were the first group to respond to the call for labor" (Roberts 2000:265). We note that multilingualism was the norm within these groups and the local Hawaiian community; hence, these comprise the substrate groups. The languages they spoke were prominent demographically in the genesis of HCE. However, these languages were all restricted contributors due to the fact that when and where they were the language learner's target language was less frequent (at home with family, outside the home with speakers of the same variety) than Standard English or Pidgin English. Furthermore, the substrate languages had possibly borne adverse social ramifications within peer group discourse and at school. Pidgin English for example "was valued as an indicator of local identity" (Roberts 2000:284). We presume there was pressure to communicate without general acquisition of a lingua franca. This required speakers immediately to develop interlanguages. This then relies on availability constraints such as congruence and perceptual salience, factors relevant to second language acquisition (Siegel forthcoming). Let us be aware then not to forget that language is the cultural and social product of human history eternally intertwined with all areas of humankind's action.

In studying language contact varieties, it is plainly the case that language science must deal with both the form a language takes and the way in which it fits the people who possess it. Roberts (2000) asserts that structural elaboration is arrived at by a language gaining a native-speaking population. Siegel (forthcoming) pushes the criterion, insisting individual pidginization is a psycholinguistic process. Social pidginization then is the sociolinguistic product of individual pidginizers.

Leading into our experiment, the data we prepared for the CM are derived from: 1) a lexifier, or superstrate, [early twentieth century] Standard English. 2) foreigner talk, a communication strategy used by all parties involved. 3) Hawai'i Pidgin English, already derived from various substrate languages in contact with a lexifier (again English). I suggest that Hawai'i Pidgin English is more important for our experiment than any of the various substrates in the genesis of HCE because of its perseverance among the local rooted Hawaiian community in terms of the number of speakers and its use in diverse functional contexts. This means Pidgin possibly occurred as a target, but not expressly used as either a substrate or the lexifier. Superstrate (also known as lexifier), and substrate refer to the different character of linguistic systems in language contact situations. Pidgin drew on an increasingly diverse pool of carriers to develop into a creole. We attempt to tease out the target forms which appeared in the natural linguistic fabric at the time of the Creole's inception. Let us now highlight salient features of the specific elements we are interested in researching in the language contact situation, insofar as they are relevant to individual creolization. What forms are available to the community? In what combinations do the forms occur? In what proportions?

If we compile a paradigm for English [+past] forms, ten are admissible as input data. To the paradigm, we add the [+past] form from the Pidgin. At this point, it is now relevant to distinguish [+anterior], past-before-past according to Bickerton, from [+past], anything that makes reference to temporally prior semantic. This rubric is illustrated in figure 1, which also helps contrast the ten English forms with the solitary pidgin constituent.

FIGURE (1) – paradigm of English past tense marking

ENG:			talked
	had		talked
	has		talked
	have		talked
		was	talking
		were	talking
		been	talking
	has	been	talking
	have	been	talking
	had	been	talking.
HPE:		bin	talk

The main alternation that occurs before the English verb, and the one we mull over most, is between conjugated forms of the auxiliaries 'have' and 'be'. The most common form of 'be' in the paradigm is 'been' while occurrences of 'has', 'have', and 'had' are equally distributed. The phrase 'most common' refers to quantifiable presence in the data set, not actual usage, which we tried to approximate through statistics from the University of Western Australia website (see below). One note on the distribution of the auxiliaries in Figure (1) is that 'had' is not restricted by person while 'have' and 'has' are. In the pidgin, [bin] is the predecessor of the contemporary HCE reflex [wen]. One final alternative exists as a way to express past in Pidgin but because it lacks form, is not included in (1). This option is to reduce the marker to zero. The English form 'V-ed' conflicts, or causes noise, in the input data set with the Pidgin form 'bin V', because both mean simply [+past]. This conflict needs resolution. Our computer program must produce an output. How the connectionist model handles two (or more) target forms for one input is the core of our experimentation. Because we are interested in what forms are produced based on such conflict of input, we did not include the zero alternate in the present experiment. If there are a number of alternates, one laid over another, whichever one is marked with zero would be indistinguishable from the overtly marked alternates. A format for the anterior forms follows (figure 2). Having an unmarked verb in the data set would only confound the program. So to represent [+past], choose from three alternates: 'V-ed', V, bin V, where unmarked V both warrants the presence of the 'bin' morpheme and its absence.

FIGURE (2) –[+past] construction template for English and Hawai'i Pidgin English forms.

ENG				Regular Verb-ed
				Irregular Verb
	'conjugated-have'			V-ed
		'conjugated-be'	V-ing	
	'conjugated-have'	'conjugated-be'	V-ing	
HPE		bin		V
				zero marking

From the best account we have, Bickerton and Odo (1976), the [bin] particle possibly meant [+anterior]; but never 100% of the time. Meanings for the form [bin] are 'change-of-state', 'anteriority', or unclear (Bickerton 1977). Over time, lenitive processes caused by low stress and the rapid speech of native speakers, factors we will return to later in our discussion, reinforced the weakened form of the initial stop, yielding [wIn] or [wEn] in the post Pidgin language contact variety. However, different percentages of [+anterior] meaning 'bin' depend on more or less basilectal styles according to Bickerton. At the same time, he maintains that "pre-1905 speakers" acquired their grammar while a stable [interpersonal] creole grammar was simultaneously in the process of being formed. The implication is that the "pre-1905 speakers" are speakers who were first to transit the pidgin straight across to creole, a process that took something like 15 to 20 years – lasting up through about 1920. Regarding the semantic aspect of the 'bin' form, Mufwene (2001) continues Bickerton's thought that if a form was around before the creole, that form's meaning will influence its meaning in the creole until at least all the old timers have dropped from the scene. Furthermore, the founder principle says that if the seeds are present in the superstrate, they will be reinforced by the regional substrates (Mufwene

2001). The languages conspire for the sake of the creole. In this light, I argue that HPE reinforces the superstrate in a similar fashion. The ideas for the features were common to all languages. We therefore predict that at least some of the creole [+past] feature will thank the pidgin forms by way of surfacing in the computer program's output.

We believe that ethnographic description, including socio-historical circumstance, plays a fundamental role in explaining the form a language produces at a given point in time. Put in a different way, a language community has a present apparition predicated from remnants of its past. Two germane opposing theories of basilectalization apply, 'restructuring' (Alleyne 2000; Mufwene 1986, 1996, and 2001), basically gradual movement from the superstrate to basilectal creole, and Lefebvre's (2001) 'relexification' rapid movement from the acrolectal creole in the direction of the substrate heavy basilect. Restructuring assumes that language is a complex adaptive system that is undone and redone repeatedly during its transmission. It can for instance "lose features and/or acquire new ones, or it can exhibit different statistical distributions of the same features within its system, owing perhaps to changes in the relative weights of factors regulating the distribution of competing variants" (Mufwene 2001:25). It is important to our work that Lefebvre includes grammaticalization in her relexification hypothesis. Relexification, copying and relabeling a lexical entry, is followed by dialect leveling, where one form wins out over many, and then reanalysis, a kind of grammaticalization, takes place. These two theories support the founder principle position. However, pidgin features' presence in a creole but creole features' absence in pidgin leads us to observe that the extent of grammaticalization can be a major formal difference between the pidgin and creole contact language varieties.

'Constructivism' is another helpful notion for us in understanding Creole genesis and why we think our network will perform in a certain way. It is the result of all parties drawing on the range of available resources (Baker 2000). Although Mufwene (1996; 2001) cites in his 'founder principle' generative entrenchment and natural adaptation (both from ecological terminology) as factors in the maintenance of early linguistic features in the genesis of pidgins and Creoles, these factors work towards the same end as regularity, perceptual salience, semantic transparency, and reinforcement in the selection of linguistic attributes. Generative entrenchment refers to a phenomenon whereby the oldest grammatical features have increased probability to prevail over possible new alternatives because they have more carriers with each following generation of speakers. Mutation, favored by ecological conditions and the proportion of carriers, has weighty influence as well. To a large extent, these arguments rely on a robust time depth, one element we are unable to do justice to with our work.

We are now equipped to investigate the process where simultaneously existing ancestor's native language and pidgin adult acquired language forms directly contribute to the formation of creole forms in a speech community. Creoles are often thought of as being the product of children's need for a first language. Without considering the full impact of the input, our theoretical endeavors stop where other researchers stopped. The mark is characterized by wondering what the character of <<language acquisition>> is which demonstrates the presence of natural orientation towards language (e.g. Bickerton's Bioprogram Hypothesis or Chomsky's famous Language Acquisition Device). As we have seen in the literature and we think this experiment will show, we must pass this threshold and ask what our CM results tell us about other [contact] language phenomena. Contact language theory in conjunction with connectionist modeling predicts that if what comes out from highly variable input is similar to HCE, then we have made an explicit account of how and why features get into the linguistic system. Furthermore, a strong version of our hypothesis can be interpreted to mean that there is no need to posit an explanation based on genetic disposition, such as the Linguistic Bioprogram Hypothesis. Conversely, should we feel that the model does not make forms that resemble the HCE forms, then previous hypotheses obviously stand tenable.

3.0. CONNECTIONIST MODEL

We now confront the research questions with connectionist modeling. It is pertinent to explain what it does and the generalizations we can make about it, briefly survey the literature, and distinguish the character of its framework. Scientists interested in analysis of the individual's language appeal to computational models based on the human brain to model cognitive functions like language, perception, and memory. Therefore, connectionist modeling draws on numerous scientific fields - linguistics, psychology, philosophy, cognitive science. The structure and function of connectionist models are based on neural systems (i.e. the human brain). These Parallel Distributed Processing (PDP) models allow information to flow in a parallel (like multiple lanes of traffic) and linear (everything sequential on one track, like a train) fashion. The systems further have the following aspects. First, there are NODES. Nodes are simple computational units. They have CONNECTIONS with other nodes. The connections between nodes have variable STRENGTHS, such that one node can better ACTIVATE a particular second node it is connected to, rather than some third node. In order to modify the connections based on the input data, the models employ a learning algorithm. This learning can be seen as encompassing the so-called 'rules' written by experts to capture natural language processes. CM, instantiated through computer modeling software, avidly advocates that nowhere in the human mind are there explicit representations of 'rules' (MacWhinney 1993) because connectionist models parallel the human brain, produce similar results, but do not employ 'rules' per se in their makeup. Therefore, connectionist models extract generalizations from the data. These generalizations are sometimes eloquently symbolized by the professional's 'rules'.

Learning deserves our attention for a while longer. In neural systems, and models of such, learning is conceived of as reorganization of existing structures because little to negligible new growth of synapses (analogous to our connections) or neurons (nodes) occurs in post-natal organisms. Probably learning consists of strengthening or weakening existing synapses to achieve its goal, to produce the desired output, given any input. This is done in our software via BACK PROPAGATION OF ERROR, a procedure where the model, upon making an output, compares it with the desired output and through gradual and incremental change to the connection weights within the network, veers the path of information in the direction of the desired output until it reaches a predetermined degree of accuracy. This represents one of two possible kinds of learning behavior. CM employs OPERANT CONDITIONING, bolstering or beating down the event strength or connection between stimulus and response. The other (and in my mind a subtype of the aforementioned) conditioning happens by establishing a stimulus which raises a response associated with another stimulus which also yields that response, termed CLASSICAL CONDITIONING.

Problems aside (Pinker & Prince 1988), it turns out that CM does display correlations with human first language acquisition such as 'U-shaped' learning across three stages of linguistic production. Note the importance of longitudinal information - duration in time. For the English past tense marker [-ed], Phase 1 is typified by few past tense marking (talked, looked) with frequent irregulars such as went and took. Phase 2 sees more use of rule application for past tense marking but with incorrect application of past regular forms with irregular verbs (perhaps something like 'taked'). Phase 3 introduces correct inception of both regular and irregular forms (looked, took). This correlation is attributable to the encoding of the data and the design of the network through either distributed or localist representation of information. DISTRIBUTED equates each thing being represented as a pattern of activation over a set of nodes, whereas LOCALIST translates to few activated nodes representing one thing. We recognize in the PDP model the distributed variety has desirable characteristics, such as allowing the program a broader basis for generalization. We have tried, on the other hand, to merge or make a concatenation of the two of them somehow because each has characteristics of human language and cognition that the other doesn't. Forging on, we fix our gaze on the actual neural network account of Hawai'i Creole English past tense genesis.

4.0. SIMULATION

Our main tenet for this work is to determine if variable input consistently represented allows a connectionist model to provide a robust solution to problems of creole genesis. Our target is, of course, HCE. Considering the linguistic phenomenon of [+past] marking in HCE, it is obvious that the structure is more complex than any single structural (phonetic-phonologic, morphologic, syntactic, or discursive) analysis can

explain. In fact, all levels are important and will play vital roles in explaining Hawai'i Creole English past-marking genesis. I illustrate this in the next few paragraphs.

Our model is meant to approximate what we can observe actual people do. Speakers, once they decide upon some semantic that they want to express, process that information, and produce some phonetic output. We limited the possible output matrix to 14 consonantal and 8 vocalic segments spread across 12 phone slots (see figure 3 below). These places are further clustered into syllables and reduced to only those sounds that occur in those slots. For example, the first slot of the first syllable can have an [h] or nothing at all. In the simulation, any syntactic variation has been reduced to templatic morphology. The verb can only occur in a certain place among our 32 distributed node sequence of phones. Suffixes likewise can only occur immediately after the verb. The output therefore uses distributed representation of the data. Nearly all of the output slots in (3) can be potentially illuminated at once. This requires eleven or so of the thirty-two possible output nodes to be active.

FIGURE (3) – Maximum proposed phonetic syllable structure for [+past] marking.

(CVC) (CVC) (C)V(C)(C/VC).

(3) may be misleading, because it looks like a vowel is the only necessary element in the output. This is not the case. The smallest form the model is trained on is VC [et] 'ate'. The first syllable (CVC) represents 'conjugated-have', the second 'conjugated-be', and the last two syllables stand for the verb. The largest profile any of the verbs has is CVCC or CVCVC . This is indicated with the backslash in the parentheses. Other fully predictable syllable shapes do occur in our data, but we will not make them explicit here.

Insofar as output today, HCE can be seen to combine [bin] or [had] with an unmarked verb depending on dialect. The form of this periphrastic, analytic construction varies depending on speaker. To facilitate our experiment, we convert periphrastic constructions into agglutinative morphology. Because of its invariance and increased regularity, the component's semantic transparency is heightened. I want to restate that [wen], a contemporary particle used to indicate [+past] is a development that occurred after Hawai'i Creole English proper coagulated; therefore, we will not be concerned with it in this simulation. The forms [bin] or [had], however, do confirm the suspicions we had about the output, based on our knowledge of contact language theory and connectionism.

Our input for the model needs to represent the linguistic ecology (Mufwene 2001) before HCE emerged. The data blocked out as follows. The eleven possible anterior forms designated by the anterior template can be expressed by three node classes in the connectionist model. These nodes are 1) verb semantic, 2) anterior feature, and 3) person. We reserve seven nodes for verbs. I chose to train the program with 'say', 'eat', 'talk', 'walk', 'sit', 'hit', and 'look'. One pilot test was done without a verb selected. The array of verbs cover CV, VC, and CVC root (coincidentally the form of the pidgin verbs) syllable structures. Further justification for selecting these verbs comes from their various regular or irregular morphological declension, cross listing on the Swadesh word list for field workers, simplex semantic, and frequent use in actual conversation (University of Western Australia 2002).

I identified three tense features - simple past, such as 'talked', past progressive 'was talking', and past perfect 'had talked' (Jespersen 1933). To put the data into a format that the connectionist model could handle while being focused on producing phonologic form, the model treats the auxiliaries 'have' and 'be' as templatic affixes (2). This mandates that 'be' can never precede 'have'. To choose a semantic and package it with person and tense, at most three of the thirteen localist input nodes need to be activated.

'Have' and 'be' are conjugated according to three Person variants: first, second and third. First and second person (and all plurals) 'have' becomes the third person singular form 'has'. First and third person 'was' translates to second person (and all plurals') 'were'. I did not find it relevant to encode the single-plural information in the creole [+past] genesis model. The input nodes (Figure 4) therefore count thirteen:

FIGURE (4) – List of what the thirteen input nodes symbolize.

1) say
2) eat
3) walk
4) talk
5) sit
6) hit
7) look
8) past
9) progressive
10) perfect
11) first person
12) second person
13) third person.

Input and output in hand, let us look at the architecture, how the nodes are connected. Between the semantic input layer (the thirteen nodes for verb, past, and person) and the phonological output layer (32 phone nodes) there is an intermediate "hidden" layer of ten nodes where extensive computation occurs. The hidden and output layers are connected to a bias node, a provision to circumvent potentially circular pitfalls inherent to connectionist models (Plunkett and Elman 1997).

The network was trained on seventy-seven [+past] forms (eleven possible variants by seven verbs), distributed across thirteen input nodes. But the verbs do not all occur with the same frequency in the input. For example 'say' occurs 430 times for every 10 occurrences of 'hit' (UWA 2002). I do not stick strictly to the MRC psycholinguistic database numbers, though, and use it instead as a guideline for assigning ratios to the input verbs. I settled on the following proportions: 5 'say' [se], 1 'eat' [it], 2 'walk' [wAk], 5 'talk' [tak], 4 'sit' [sIt], 1 'hit' [hIt], and 1 'look' [LUk] where every entry in the model represents ten occurrences in the database. The computer was therefore trained on 209 lines of input paired with 209 correlate outputs. I set the learning rate and momentum at a healthy level, to slide a little favor towards the network. In 1000 passes through the data, the program maximally reached about a .1 error rate. This is an acceptable figure in CM. So, the degree of accuracy was not terrible. Next, I used the option 'verify the network has learned' and looked at the results. [h], [ae], [d] ('had') and [b], [I], [n] ('bin') were identifiable and present in the verified output (cf. Figure 5). This confirms a small part of our prediction about the performance of the connectionist model, that it would rightly produce either 'bin' or 'had'. Then again, the output is more complicated than this. We address the other (unexpected) outputs and why we think they occurred, in the discussion section below.

Some final comments on the model: remember there is noise in the input. More exactly, two desired outputs have identical semantic representations. Standard English past tense [V-ed] and Pidgin anterior construction [bin V] are encoded the same. This ambiguity, compounded with the nine other alternatives, should provide sufficient grounds for the network to produce some kind of [+past] on its own. In order to get the model to do so, the final step was to input the declension pattern, after the network learned, without a verb and without any output specified and observe what happens. This operation provides the best indication of what the program is able to do. Figure 5 summarizes the test results.

Figure 5 shows us exactly how our hypothesis is substantiated and where it is not. As forecast by contact language theory, in the section above, there is robust presence of [bin] supplied by the overlap already highlighted (test result 5.1 and 5.2). It also makes its mark in (5.8). It is curious though that the form targeted on 'been V-ing' (5.8) simultaneously produced 'been' and 'were'. The forms 'has' and 'have' appeared where we expected them to. The co-suspect 'had' turns up in (5.11). A further surprise was that 'was' and 'were' were chosen over 'been' for the perfect-progressive and past-perfect-progressive input codes (results 5.9–5.11). So, in the output, we got more than we bargained for.

FIGURE (5) – Results from no verb – no desired output [+past] test. Elements in examples 1-11, under full output, which are in parentheses did not achieve an activation that could be considered strongly activated. They are included because they did receive some activation. Examples under reduced heading are presented without the partially activated segments. (Digraphs are used for schwa [uh] and engma [ng]. E stands for epsilon. All other graphemes should be clear from preceding discourse.)

INPUT	PARADIGM	CONTRACTED	FULL OUTPUT	REDUCED
say	V-ed	--	5.1 bin (sLUt)k(t)	bin k
eat	bin V	--	5.2 bin (sLUt)k(t)	bin k
walk	had V-ed	'd v-ed	5.3 (haed wuhz s)wA(t)k(t)Ing	waking
talk	has V-ed	's V-ed	5.4 haez (LUtktn)	haez
sit	have V-ed	' ve V-ed	5.5 haev (LUt)k(tn)	haev k
hit	was V-ing	's V-ing	5.6 (z)wuhr (LIUt)king	wuhr king
look	were V-ing	're V-ing	5.7 wuhz(r w)A(It)kIng	wuhz AkIng
PAST	been V-ing	--	5.8 bwEuhnz (At)kIng	bwEuhnz king
PROGRESSIVE	has been V-ing	's been V-ing	5.9 haez(d) wuhz (ti)A(t)kI(E)ng	haez wuhz AkIng
PERFECT	have been V-ing	' ve been V-ing	5.10 hae(z)v wuh z (t)A(t)kIEng	haev wuh z AkIEng
1 PERSON	had been V-ing	' d been V-ing	5.11 hae(z)d wuhz(r w)A(It)kIng	haed wuhz AkIng
2 PERSON				
3 PERSON				

5.0. DISCUSSION

The decisions we made in building our connectionist model have repercussions. One consequence of eliminating broader context, for example, is that we were unable to encode relative prominence of stressed elements, which should appear more prominently in the input, in relation to contractible, stressless elements. We realize that stressless uncontracted constituents ('been', 'had', 'was') are probably more salient than stressed, contracted constituents, which would presumably be subsumed by the element it is contracted onto (e.g. I've, he's, you'd). Therefore, to resolve the problem, we postulate that the 'was/were' allomorphy is more contractible than the 'has/have/had' morpheme.

Another aspect of the output, 'was' occurring where we thought 'bin' or 'had' would, is explained by a correlation between the endings on the verbs, particularly the past progressive '–ing' with the auxiliary morpheme 'was' (5.3, 5.6-5.11). Randomizing the input is a training option available in tlearn that may help us in the future to investigate our suspicion that '-ing' triggers 'was'. I put the progressive forms in the data so that we might see to what extent they play a role in the hatching creole. (5) indicates that the compound past tense constructions in 5.3-5.11 motivate at least the suspicious 'had' form. If they also motivate the 'bin' form, it is not sufficient enough for pronunciation. It is not outrageous to assume that the use of contracted forms in the natural linguistic environment was pervasive, causing the presence of the [+past] 'bin' or 'had' morpheme to be escalated.

An additional limitation of the morphologic solution we settled on is that the salience of the 'be' and 'have' forms decreases, because we encode them at the level of the verb, not the verb phrase. Acquiring "vocabulary items does not 'involve making guesses about the structure of whatever they [were] learning' except insofar as the identification of word-boundaries can be considered such" (Baker 2000:48). I take this to be applicable to the auxiliary-verb sequence. Therefore, I think that encoding contracted and full forms in the input would drastically effect 'conjugated-have' in the output. One solution may be to introduce variable activation, where 1=stressed, .7=pronounced, .4=present but not pronounced (or deleted during contraction) and so on, in the input. Then we could use the same yard stick when analyzing the output. However, expanding to encompass reduced forms again requires more contextual information, particularly specifying the constituent that is being contracted. Not all environments permit contracted auxiliaries. The morphological conversion adopted for the experiment is probably hindering the ability of the connectionist model to mimic real world phenomena. So, let us interpret the results in the bigger picture.

The findings of this experiment were basic. A neural network produces the phone sequence 'bin k' to express [+past]. Yet, the implications are abundant. Interested, as we are, in expanding our research results to other creoles and contact language phenomena, how can we shine new light from CM on contact language varieties? Well, at the most comprehensive level, CM aligns well with work on endangered languages, underscoring the worth of "interdependence between biological and cultural diversity" (Maffi 2002), a trend that is snowballing support in the humanities. This is supported by the various terminologies we introduced earlier that echo terms from biology. Moreover, CM provides exact and explicit explanation of how features are incorporated into creoles (and pidgins) and why such features get chosen over others. The computer program takes an explicit input, processes it according to an algorithm that allows the model to change incrementally in the direction of a targeted – available in the environment – output. It may facilitate our discussion to conceive of 'targeted' and 'taught' information in the connectionist model like heard forms for actual language users. Once the program has been taught some information, it can take new input and produce an output. Our independent 'no verb – no desired output' test illustrates this. The spontaneous output produced by the connectionist model shows which features were picked. As stated earlier, the project mutually benefits second language acquisition theory such as Siegel's (2000:210) 'Availability Constraints', which are:

> "Factors which may determine the likelihood of a substrate feature being transferred [...] The most important is the existence, in the superstrate language, of a perceptually salient morpheme (i.e. a free or potentially stressed morpheme) that has a function or meaning related to a corresponding morpheme in the substrate language. This superstrate morpheme can then be used or reanalyzed according to the substrate pattern."

Note the direct correlation of this passage to the data we have. We know 'been' and 'had' were in the superstrate and that at least in some environments that they took stress. The function and semantic of these morphemes correspond with the 'bin'/'had' morphemes in the Pidgin linguistic system, including substrate characteristics not elaborated here. The superstrate morpheme can then be seen to be reanalyzed according to the pattern in the substrate (Figs. 1 and 5). It helps that the morphemes are related congenially. They are not quite cognates, but undoubtedly the pairs 'bin' and 'had' are related to 'been' and 'had'. Sebba (1997:53) states that "'reinforcement' of one vocabulary item by another [...] is a significant factor in determining which lexical items from the source language become a part of a pidgin's lexicon and which not". In a more sophisticated version of this connectionist model, other substrates would take part in comprising the input. Of course, output configuration would be modified accordingly.

The notion of reinforcement naturally extends to creole genesis, where certain forms either enter the linguistic system or they do not. Since we have admitted to possible influence from other linguistic systems due to their speakers being in contact, I would like to suggest that these speakers seem somehow to be adapting or customizing the languages in the contact situation to become more similar to one another, a process referred to as convergence (Sebba 1997). Although reinforcement is not convergence and vice versa, the processes parallel and complement one another with astonishing felicity.

Vocabulary is a stepping-stone to grammar. "There would seem to be no precedent for studying the acquisition of words without attempting to learn the language from which they came" (Baker 2000:49). By considering a single phenomena through the lens of contact language theory and connectionist modeling, we can

investigate the universal character of the human cognitive system (e.g. the need to have a grammar) and to what extent it can be held responsible for a linguistic system's genesis.

6.0. CONCLUSION

Our forthright concern in this paper was to review creole genesis. Theoretical controversies over contact language variety genesis arise from unsettled tension between universal, substrate and superstrate, second language acquisition, and prototype theories. One challenge we have in our curriculum is the question of whether a connectionist model, by way of generalization etc, is able to arrive at forms that exist in the creole language. We saw that it does. Our model produced a consistent output when provided with an input with competing forms. This result would seem to suggest an account for universals that needs to entail learning ability, learn-ability, and a need for grammar. Our model also produced an output consistent with facts from the creole. We have essentially provided evidence that may support other theories that herald general cognitive resources such as factors from Second Language Acquisition and substrate and superstrate mobility. For one linguistic phenomenon, [+past] marking, we shaped a connectionist model which demonstrated that an irregular input and cognitive facility, makes a specific account for the genesis of this HCE grammatical feature.

Genesis is tied with the nature of the contact situation. This is reputedly the single most important factor in differentiating the HCE and other creole experiences (Roberts 2000). It seems clear for linguistic functions that accurately replicating the input that triggered the creole to converge is of utmost importance. It is from this kind of reconstruction that we can replay the strands of history that reveal the origins and internal struggles of the contact language variety. Connectionist modeling makes a convincing argument for cognitive resource in place of specific language modules responsible for language acquisition and more strikingly, how contact language varieties acquire a regular form. In our research, we saw that the individual connectionist network equivalent of grammaticalization, cf. generalization, regularly produced forms reminiscent of the actual creole. This outcome indicates the model used its own neural network, albeit severely restricted, to negotiate a path into native language. Because our research was somewhat fruitful, supplementary research is in order. Our model lacks substantive longitudinal and social depth. Added to the connectionist model presented so far, these two dimensions should show us, beyond reasonable doubt, the process of creole genesis and perhaps other less well understood phenomena.

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INTERROGATIVES IN PINGILAPESE

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ABSTRACT

Pingilapese is a Micronesian language, specifically, one of the three varieties of the Pohnpeic language, counting about 2,500 speakers living on Pingilap atoll and the island of Pohnpei. It is currently fairly underdocumented, the only official existing study being a sketch grammar compiled by Elaine M. Good and Weldis Welley in 1989.

The present paper contributes to the study of Pingilapese by focusing on interrogatives. It is largely based on the elicitation from Billie Jean Welley, a young Pingilapese native speaker, and it relies only minimally on the sketch grammar, as this presents a large amount of flaws. We know that Pingilapese is more similar to Mokilese than to the other Pohnpeic languages. However, I will point out that Pohnpeian is closer to Pingilapese than Mokilese and will try to shed some more light on the relation between Pingilapese and Pohnpeian.

In Pingilapese, questions can be formed by following two options: *in situ* and focus. I will discuss how historically Pingilapese has diverged from Pohnpeian by looking at a rule called Monosyllabic Noun Vowel Lengthening Rule. I will then show a couple of curious and rare phenomena which are also found in Pohnpeian: that of interrogative verbs and nouns. Finally, I will discuss some interesting interrogatives: *ihs* and *iahwen/daepae*.

1.0. INTRODUCTION

Pingilapese is a Micronesian language spoken on the Pingilap atoll and Pohnpei island. It is considered to be a Pohnpeic language, this term including Pohnpeian, Ngatikese, Mokilese and, obviously, Pingilapese. As Kenneth Rehg (1981) points out, there is a higher degree of similarity between Pingilapese and Mokilese on the one hand, and between Pohnpeian and Ngatikese on the other, even though Pingilapese is closer to Pohnpeian than Mokilese. These conclusions can be stated pretty safely, even though much more work needs to be done.

The present paper originates from a Field Methods class which I took last semester at UH Manoa. I would like to thank Billie Jean Welley, our Pingilapese informant, for the data elicitation, her patience and punctuality. The paper is primarily descriptive, rather than theoretical, since my research on this language has just begun.

2.0. QUESTION FORMATION: *IN SITU* VS. FOCUS

Pingilapese is an SVO language.

(1) *Maeri kangaela apoleu*
Mary eat-pst. apple-one
'Mary ate an apple.'

Question formation is carried out by two strategies: *in situ* and focus. Let us look at them in some detail.

2.1. *IN SITU*

Under the *in situ* strategy, the interrogative appears in its default position:

(2) *Ke loakaeiahng reh ihs?*
you talk-to to whom
'Whom did you talk to?'

(3) *Kaen aedaela mwoa?*
you by which means there
'How will you get there?'

(4) *Sohpas aen mwaekid ngahd?*
ship-one fm move when
'When is the ship leaving?'
fm=future marker[1]

(5) *Sohpas aen ahla ia?*
ship-one fm go where
'Where is the ship going?'

2.2. FOCUS

Under the *focus* strategy, the interrogative appears at the beginning of the sentence. This second strategy is realized by two options:

- The interrogative is followed by the focus marker *mae/me*;
- The interrogative is not followed by the focus marker.

The focus marker consists of two forms, *mae/me*. The former seems to be used with intransitive verbs, whereas the latter occurs with transitive verbs.

It appears that the focus marker (FM) syntactically does not belong to the interrogative, but to the following phrase. In fact, FM does not always occur in question formation: it neither appears under the *in situ* strategy (see examples above), nor in the case of several interrogatives requiring/permitting the focus strategy:

(6) *Iahmwoamwae kaen wia?*
how you will act
'How will you act?'

(7) *Iah sohpa aen ahla?*
where ship-one fm go
'Where is the ship going?'

It is however interesting to notice that Pingilapese presents a mismatch between the syntactic phrase and the phonological phrase in question formation. The case of the interrogative *da/dah* ('what') is a good example of this. Pohnpeian requires that all pronouns standing for entire noun phrases have at least two moras. Therefore, the corresponding Pohnpeian word for Pingilapese *da* (which is also *da*) when taking this function (i.e., at the end of a sentence) is lengthened. This rule, called 'Monosyllabic Noun Vowel Lengthening Rule' by Rehg or MNVLR, predicts that all monosyllabic nouns have a long vowel. Here is an example from Rehg's grammar, compared with Pingilapese:

(8) Pohnpeian:
Re kukih dah?
'What did they cook?'

(9) Pingilapese:
Ke kaieu naemae kang da?
you first favorite eat what
'What do you like to eat the most?'

However, this rule seems not to be followed in Pingilapese, since the short form occurs at the end of the sentence (under the *in situ* strategy). Nonetheless, under the focus strategy, the long form is retained (*dahmae/dahme*). This occurs because the interrogative and the focus marker form a single phonological phrase. Example (10) shows this claim:

(10) *Dahmae* *ke* *kaieu* *naemaen* *kang?*
what you first favorite eat
'What do you like to eat the most?'

In (11), a few forms from Rehg's grammar are compared to show how MNVLR operates on Pohnpeian, but not in Pingilapese:

(11)

Pohnpeian	Pingilapese	English
pihk	*pik*	'sand'
wahr	*war*	'canoe'
lih	*li*	'woman'

Let us now look at the case of *ia/iah* ('where'):

(12) *Iah* *saehdeu?* / *Saehdeu* *ia?*
where shirt-one shirt-one where
'Where is the shirt?'

This interrogative does not require a FM. In Pohnpeian, however, *iah* never occurs. Let us look at Rehg's examples:

(13) *Ke* *pah* *kohla* *ia?*
'Where are you going?'

(14) *Iawasa* *ke* *pahn* *kohla* *ie?*
'Where is that you are going?'

Ia must go with the locative *wasa* ('place'): no *iah* is permitted. The observation is, then, that in Pingilapese MNVLR applies for *ia/iah*, but not for *da/dah*. The conclusion is therefore that historically, both Pingilapese and Pohnpeian must have had this rule, but at some point Pingilapese lost it for *da/dah*, and retained it for *ia/iah*.

2.3. A FINAL CONSIDERATION ON *IN SITU* AND FOCUS

The two strategies for question formation are not available to all interrogatives. However, whenever both are allowed, a higher tendency to use the focus, rather than the *in situ* strategy, is observed.

3.0. LIST OF INTERROGATIVES

Here is a complete list of the interrogatives occurring in Pingilapese. The list shows that interrogatives can consist of either single words or two words which can stand alone as complete sentences. Among one-word interrogatives several elements not directly found in English are present.

Interrogative		*In situ*	Focus	*Mae/me*
a)	*Da/dah* 'what'	Yes	Yes	Yes
	Ihs 'who, whom'	Yes	Yes	Yes
	Ngahd 'when'	Yes	Yes	Yes
	Ia/iah 'where'	Yes	Yes	No
b)	*Aedaela* 'by which means'	Yes	No	No
	Aedaeng 'where in relation to'	Yes	No	No
c)	*Paid/pais* 'who else'	Yes	No	No
d)	*Iahwen/daepae* 'how much/how many'	No	Yes	Yes
	Maehnia 'which'	No	Yes	Yes
	Ahiaed 'why'	No	Yes	No
	Iahmwoamwaen/iahpwae 'how, what is the appearance of'	No	Yes	No
	Dahmae soakin 'why not'	No	No	No
	Pwa da 'why'	No	No	No

The interrogatives are divided into four groups:

a) Monosyllabic interrogatives
b) Interrogative verbs
c) Interrogative nouns
d) Morphologically complex interrogatives, formed as some combinations of interrogatives from group a) and other words

3.1. SOME INTERESTING INTERROGATIVES

Along with expressions corresponding to 'who' or 'when', there are expressions corresponding to more complex meanings such as 'where in relation to' or 'by which means': these (constituting group b)) are interrogative verbs and represent a fairly uncommon phenomenon, also present in Pohnpeian. Here are a couple of examples:

(15) *Imwoamw e* *aedaeng* *wasahpwi* *aen* *Soahn*
house-yoursm where in relation to area/location POSS. John

oapeseu *aeminae?*
office existence-of
'Where is your house in relation to John's office?'
sm=subject marker

(16) *Kaen* *aedaela* *mwoa?*
you by which means there
'How will you get there?'

Another uncommon phenomenon, also found in Pohnpeian, is that of interrogative nouns, represented by group c), with only one element present:

(17) *Kaewae* *daekah* *paid/pais?*
you and who else
'You and who else?'

Moreover, particularly interesting are the following interrogatives:

- *Ihs*, which has a very widespread use with the meanings 'who', 'whom' and, roughly, 'whose'. Pingilapese distinguishes between inalienable and alienable nouns: inalienable nouns are common nouns referring to body parts and words such as *ad* 'name, *mwar* 'title' and *ngenengen* 'shadow' and which are suffixed to show possession. In the case of questions, the possessive forms are followed by *ihsmae/ihsme*. Alienable nouns are nouns which are preceded by a possessive form called 'classifier'. This is a common characteristic of Micronesian languages. Pingilapese has 11 classifiers, a number which may seem large, but that is outnumbered by Chuukese, which can boast over 100! In the case of questions, the classifiers are followed by *ihsmae/ihsme* and the form accompanied by the classifier.

A list of classifiers follows:

Classifier	Occurrence
aeh/aen	nouns specifying fairly large things and things that are not necessarily considered to be a favorite possession
naeh/naein	nouns that specify small things, things controlled by the owner and things that are a favorite possession of the owner
kaenaeh/kaenaen	nouns specifying food
nimaeh/nimaen	nouns specifying drinking things
ngidaeh/ngidaen	things which are both chewable and fibrous
waeraeh/waeraen	nouns specifying means of transportations
sapweah/sapwaen	only with the noun *sapw* 'land/island'
imwaeh/imwaen	only with the noun *ihmw* 'house'
saemaeh/saemaen	indicating older male members of a family or relatives
inaeh/inaen	nouns indicating older female members of a family or relatives
riaeh/riaen	nouns indicating members of a family or relatives of a same generation

- *Iahwen/daepae*, the first meaning 'how much' and the second 'how many', but with the possibility of being used interchangeably.

(18) *Iahwen aeraemas ma minae pwoah daekaeh Pingilap?*
how-much people FM exist on atoll-of Pingilap
'How many people live on the Pingilap atoll?'

(19) *Aeraemas daepae mae minae pwoah daekaeh Pingilap?*
people how-many FM exist on atoll-of Pingilap
'How many people live on the Pingilap atoll?'

Remember that these interrogatives allow only the focus strategy. Notice that *iahwen* requires the insertion of the noun between itself and *mae/me*, whereas *daepae* is directly followed by *mae/me*, which, once again, confirms that syntax prevails on phonology.

4.0 CONCLUSION

Much investigation on Pingilapese still needs to be done. In this paper, I tried to contribute to its study. As we have seen, Pingilapese forms questions through two strategies: *in situ* and focus. Under the focus strategy, particularly interesting is the use of the FM *mae/me*, which creates a mismatch between syntactic and phonological phrase. Pingilapese presents some interesting phenomena, such as interrogative verbs and the

interrogative noun. Historically, Pingilapese phonology has diverged from Pohnpeian in many ways: the disappearance of the MNVLR in the case of *da/dah* is an illustration of this. It is however interesting to notice that until now it was unknown that this particular divergence did not apply in all cases, as i*a/iah* shows. It would be very interesting to investigate more about the phonology of this language, in order to find other possible discrepancies between Pingilapese, Pohnpeian and the other Pohnpeic languages, since this would obviously provide us with a finer and better understanding of the relationships among them.

NOTE

1. In the present paper I will indicate a future marker by 'fm' and a focus marker by 'FM'.

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ASPECT MARKING IN CHILD VIETNAMESE

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1.0. INTRODUCTION

There has been considerable debate regarding the acquisition of tense and aspect by young children. Studies on the acquisition of tense-aspect morphology have either attempted to make a distinction between tense and aspect, or they have centered their analyses around Vendler's (1967) four-way classification of the inherent semantics of verbs: achievement, accomplishment, activity, and state. This paper examines the acquisition of aspect morphology in a Vietnamese child.

One central hypothesis has been the Aspect Hypothesis (Antinucci & Miller, 1976) which states that in the early stages, (A) "Children first use past (or perfective) marking predominantly with achievement and accomplishment verbs, eventually extending their use to activity and finally to stative verbs." (B) "In languages that have progressive aspect, children first use progressive marking mostly with activity verbs, then extending it to accomplishment and achievement verbs."

Shirai and Andersen (1995), in their prototype-based account for the development of tense-aspect morphology, based their analysis on Vendler's schema and found that children use past inflections predominantly with achievement verbs, and progressive inflections with activity verbs. They concluded that past and progressive inflections are initially restricted to certain semantic classes of verbs, also known as the inherent lexical aspect or *Aktionsart*. Thus their key argument was that the inherent aspect of verbs has a strong influence on the development of tense-aspect morphology. Their result is also in line with statement (A) of the Aspect Hypothesis that past (or perfective) marking occurs primarily with achievement and accomplishment verbs[1] in early stage, and extend to activity and stative verbs at a later stage. One further observation they made was that children use progressive inflection approximately at the same time they use past inflection.

Hoekstra and Hyams (1998), in their study on aspects of root infinitives, among other things proposed the Eventivity Constraint (EC), a constraint on the aspectual nature of the verb, which states that (a) non-finite verbs are typically eventive and (b) stative verbs are exclusively finite. Eventive verbs include activity, achievement, and accomplishment verbs. Stative verbs express states and are non-eventive.

The research questions addressed in this paper are: (1) Does the Aspect Hypothesis hold true in child Vietnamese speech production? (2) Does the inherent lexical semantics of verbs have any effect on the development of tense-aspect morphology in Vietnamese? (3) Does the Eventivity Constraint apply in child Vietnamese?

2.0. ASPECT IN ADULT VIETNAMESE

Vietnamese has SVO word order. It is an isolating language, thus has no inflectional morphology. Verbs do not get inflected, but there are various free morphemes that go along with the verb to express Aspect.

TABLE 1: Aspect marking in declaratives

aspect type	***preverbal***	***postverbal***
present habitual	Ø	Ø
present progressive	đang	Ø [2]
past / perfective	đã	rồi
Future	sẽ	Ø

Meaning (taken from Ngo, 1999)

đang	= to be happening, occurring	(progressive)
đã	= to have happened, occurred	(past)
sẽ	= to happen, occur [in the future]	(future)
rồi	= finished, completed, already	(perfective)

There are two types of markings for aspect. One type consists of *preverbal* markings. These are widely used in writing and formal conversation, except for the progressive marker *đang* and future marker *sẽ*, which can also occur in informal conversation. The other type of marking is *postverbal.* There is only one postverbal marking for the perfective, *rồi*. It can occur in writing but is very common in informal conversational context.

The difference between *đã* and *rồi* lies in the subtlety that *đã* expresses more of the past tense, and *rồi* carries more of a perfective aspect. The difference between the preverbal and postverbal markings is that preverbal aspect markers must immediately precede the verb; no lexical item can come in between. On the other hand, postverbal aspect markings do not have to follow the verb immediately. Other lexical items can come between the verb and the marking. The following examples show the contrast:

(1) Em bé đã uống sữa.
Baby Asp drink milk.
'The baby drank milk.'

(2) Em bé uống sữa rồi.
Baby drink milk Asp
'The baby drank milk.'

Tense/aspect can also be signaled by the use of a time adverb. In this case, the aspect marker is optional for the past and future, but not for the present progressive.

Vietnamese, like a few other Southeast Asian languages, has adjectival verbs which are stative. This means that the verbal system lacks the copula *be* when used with an adjective. For example, in the sentence 'the cat is cute', *is* is omitted, and typically includes the degree word *qua* 'too' or *lam* 'very' in conversational context.

(3) Con mèo dễ thương quá.
cl cat cute too
'The cat is very cute.'

One last note: Subject drop in adult Vietnamese is very common, especially in conversations. Speakers rely a great deal on discourse context. It is important to understand what has been said in previous discourse so that speakers can be aware which grammatical elements should be omitted and which forms of address should be used.

3.0. METHODOLOGY

The data used for analysis is taken from the naturalistic speech of a monolingual Vietnamese female child, Kim, at the age of 1:9. (MLU = 2.0) The recording was done by the child's father primarily at home, and the last 45 minutes in the car and at the playground. The duration of the recording is approx. 3 hours on audiotape.[3] The total number of utterances[4] in this three-hour-stretch of data including imitations and repetitions is 897. Of these, 201 utterances were eligible for counting. These are spontaneous one-word to multiword utterances excluding imitations, repetitions, and unintelligible utterances. Out of the 201 utterances eligible for counting, 46 were nominal utterances and 155 were verbal utterances. For analysis, only verbal utterances are considered.

TABLE 2: Types of verbal utterances

Declaratives	118
Imperatives	37
Total	155

The types of utterances used for analysis are only declaratives as they contain aspect markers.

4.0 ACQUISITION DATA

TABLE 3: General breakdown of verbal utterances

Type of VP / IP	*Occurrences*	*Example*
V	19	write
V + N	27	draw dog
V + P	4	go in
V + (N) + Subj. NP	5	hug Daddy
V + V + N	1	draw kick horse
V + N + N	1	change diapers horse
Subj. NP + V	25	Daddy eat
Subj. NP + V + Obj. NP	4	Daddy take milk
Subj. NP + V + V	1	Daddy come lie
Adj.	26	dirty too

The sentence types shown in table 3 indicate that Kim's utterances are characterized as telegraphic speech.

5.0. ANALYSIS: ERRORS OF OMISSION

5.1. RESULTS.

Table 4 shows the number and percentage of Kim's correct use and omission of the expected aspect type in declaratives.

TABLE 4: Types of aspect and number of correct use and omission of aspect markers

aspect type	*correct*	*omission*	*Total*
Present stative [5] (zero marker)	16 (100%)	0 (0%)	16
Present habitual (zero marker)	4 (100%)	0 (0%)	4
Present progressive (đang)	0 (0%)	10 [6] (100%)	10
Perfective (rồi)	36 (90%)	4 (10%)	40 [7]
Past (đã)	0 (0%)	0 (0%)	0
Future (sẽ)	0 (0%)	(0%)	0
TOTAL			70

As the results in table 4 indicate, there is a noticeable high frequency of the use of the past aspect marker *rồi* (90%). The omission of aspect marker *rồi* was only 10%. Conversely, the omission errors occur all the time in the present progressive with the aspect marker *đang*. There are no errors in the present stative and habitual as they do not require a marker. No utterances with the past aspect marker *đã* and the future marker *sẽ* were produced at all.[8] (The total of 70 above out of 118 is excluding repetition.)

5.2. INHERENT SEMANTICS OF VERBS

To attempt to account for the omission of the perfective aspect marking, I looked at all the verbs that should occur with the past or perfective aspect, and examined them in terms of their lexical semantics, as proposed by Shirai and Andersen (1995).

TABLE 5: Vendler's (1967) four-way classification of the inherent semantics of verbs (adapted from Shirai and Andersen 1995):

Semantic type	***Definition***	***Example***
STATE (non-eventive)	that which has no dynamics, and continues without additional effort or energy being applied	*see, love, hate, want*, etc.
ACTIVITY (eventive)	that which has duration, but with an arbitrary endpoint, and is homogeneous in its structure. For example, in *John is running*, at every moment the fact of his running has the same quality of running	*run, sing, play, dance*, etc.
ACCOMPLISHMENT (eventive)	that which has some duration, but has a single clear inherent endpoint	*run a mile, make a chair, build a house*
ACHIEVEMENT (eventive)	that which takes place instantaneously, and is reducible to a single point in time	*recognize, die, reach the summit*, etc.

5.2.1. PAST/PERFECTIVE ASPECT MARKING

Next, the data introduced in table 6 serve the purpose of testing the 1st half of the Aspect Hypothesis, which states that "children first use past (or perfective) marking predominantly with achievement and accomplishment verbs."

TABLE 6: Verb types occurring with intended **past/perfective** aspect marking[9]

Semantic type	***Child's utterance***	***Gloss***	***Omission***
STATE (non-eventive)	(1) tả chật quá rồI diapers tight too Asp (2) giày dơ quá rồi shoe dirty too Asp (3) nắng quá rồi sunny too Asp (4) nóng quá rồi hot too Asp	'diapers too tight already' 'shoes too dirty already' 'too sunny already' 'too hot already'	
ACTIVITY (eventive)	(5) ma-mi đi chợ Mommy go shop (6) ma-mi đi tắm Mommy go bathe (7) ba-bi ăn baby eat	'Mommy go shopping' 'Mommy go take a shower' 'baby eat'	√ √ √
ACCOMPLISHMENT (eventive)	(8) thay tả rồi change diapers Asp (9) ăn (N) rồi eat Asp (N = soup, rice paper) (10) đánh răng rồi brush teeth Asp	'(Daddy) has changed diapers' '(I) have eaten' (N = soup, rice paper) '(I) have brushed teeth'	
ACHIEVEMENT (eventive)	(11) gẫy rồi break Asp (12) má về rồi Mom come Asp (13) ngả rồi fall down (thing) Asp (14) ba-bi té rồi baby fall down Asp (15) ướt áo rồi get wet shirt Asp (16) đổ rồi spill Asp (17) thằng lằng đi rồi gecko leave Asp (18) kiến ra rồi ant come out Asp (19) trời mưa rồi sky rain Asp (20) trúng đầu bang head	'(It) broke.' 'Mom came.' [10] '(The blocks) fell down.' 'Baby fell down.' '(Kim's) shirt got wet.' '(Kim) spilled.' '(The) gecko left.' 'Ants came out.' 'It started to rain.' '(I) bang head.'	√

In this table, the checkmark in the 'omission' column means that the child omitted the perfective aspect marker that is supposed to be there in adult speech. The errors of omission only occur in activity verbs, but not in accomplishment and achievement verbs (except for one error in item 20, 'bang head'). For the majority the perfective marking *rồi* is produced correctly by the child.

Regarding the stative verbs, the only ones that occurred in the data are those that have an adjectival verb. Of course there are other stative verbs such as *see, know, love, hate* etc., but this particular Vietnamese child at the age of 1;9 has not acquired these verbs yet, but she was able to produce adjectival verbs which are stative. And as can be seen from the table, statives are consistently produced with the correct perfective marking.

All the above results clearly indicate that lexical semantics of verbs causes omission of aspect marking in child Vietnamese.

5.2.2. PROGRESSIVE ASPECT MARKER

Recall from table 3 that omission occurs primarily with the present progressive marker *đang*. Thus, I next examined in what types of verbs the omission of this progressive marker generally occurred.

TABLE 7: Omission of the **progressive** aspect marker

STATE	ACTIVITY	ACCOM-PLISHMENT	ACHIEVE-MENT
0	10	0	0

I found that omission of the progressive aspect marker occurred in activity verbs. This means that all 10 verbs that repeatedly came up in the data that were supposed to have a present progressive marker were of an activity type. The following actual utterances from the data exemplify the child's typical errors of omission of the progressive marker in activity verbs:

Child's utterance	***Adult form***	***Gloss***
(1) để dô put in	con đang để dô child Asp put in	'I'm putting in.'
(2) ôm chó hug dog	con đang ôm chó child Asp hug dog	'I'm hugging the dog.'
(3) viết write	ba đang viết Dad Asp write	'Daddy is writing.'
(4) vẻ draw	ba đang vẻ Dad Asp draw	'Daddy is drawing.'
(5) xích ra move out	con đang xích ra child Asp move out	'I'm moving out.'
(6) Kim đổ Kim pour	Kim đang đổ Kim Asp pour	'Kim is pouring.'
(7) ba ăn Dad eat	ba đang ăn Dad Asp eat	'Dad is eating.'
(8) uống drink	con đang uống child Asp drink	'I'm drinking.'
(9) ba đi nằm Dad go lie	ba đang đi nằm Dad Asp go lie	'Dad is going to lie down.'
(10) bỏ thùng đồ quá put box things too	con đang bỏ nhiều thùng đồ child Asp put many box things	I'm putting too many boxes.'

6.0. DISCUSSION

My general observations regarding this child's verbal knowledge are that she always uses a bare verb when a bare verb is required (see present stative and present habitual in table 3). The child at this stage is able to produce the postverbal past/perfective aspect marking *rồi* both with verbs and adjectival verbs. She is able to omit the copula verb 'be' and has the knowledge of using the adjective as a full verb. However, she is not able yet to produce any preverbal aspect marker. Recall from table 1 that the preverbal aspect marker *đang* is used to express the progressive and the aspect marker *sẽ* is used to express the future aspect. Since these preverbal markers have not emerged for the child yet, she is not yet able to refer to the progressive and future aspect.

6.1. PERFECTIVE

Errors of omission do not occur in accomplishment and achievement verbs. The perfective marking *rồi* is produced correctly, except for the one error in item (20), *trúng đầu* 'bang head'. The majority of the aspect markers occur with achievement (10 tokens) and fewer occur with accomplishment (3 tokens). Errors of omission occur in activity verbs as they receive no perfective marking. These results support the 1st half of statement (A) of the Aspect Hypothesis.

Statives are consistently produced with the correct perfective marking. The Vietnamese child is at a stage where perfective aspect marking for activity has not emerged yet, but it has already emerged for stative verbs. This is counter-evidence to the 2nd half of statement (A) of the Aspect Hypothesis.

6.2. PROGRESSIVE

The child omits the progressive marker consistently. She just uses the bare verb to expressive present progressive. This finding provides counter-evidence to the claim that children use progressive inflection approximately at the same time they use past inflection (Shirai & Andersen, 1995). The omission of progressive marker occurs only with activity verbs (table 7). This gives counter-evidence to statement (B) of the Aspect Hypothesis.

6.3. EVENTIVITY CONSTRAINT

In languages that have inflectional morphology, finite verbs are those that have inflection, and non-finite verbs are those that lack inflection. In Vietnamese, non-finite verbs are those that lack an aspect marking; finite verbs are those that have aspect marking. The results (table 6 and 7) show that activity verbs, which are eventive, are the only ones that lack aspect marking and thus are non-finite. All stative verbs, which are non-eventive, have the aspect marker and thus are finite. These results clearly support the Eventivity Constraint which states that all non-finite verbs are eventive and all stative verbs are exclusively finite.

7.0. CONCLUSION

The well attested generalization that past inflections are initially restricted to certain semantic classes of verbs holds only partially true for Vietnamese. Inherent lexical semantics of verbs can cause the omission of aspect markings, so it has an influence on the development of aspect morphology in child Vietnamese. Absence of progressive marker in Vietnamese suggests that there must be cross-linguistic variation in the emergence and development of aspect/tense.

A speculation could be made that the set of preverbal aspect markers has not yet emerged at this telegraphic stage, while the postverbal aspect marking has emerged because they are more commonly used in conversation. Another speculation is that children, in general, learn postverbal elements faster because they tend to remember the final words in an utterance better. There is also more input of this postverbal marker by the caretakers.

8.0. FUTURE DIRECTION

Further data is needed in order to determine at which stage Vietnamese children acquire the progressive marker, whether they acquire it shortly after they have acquired the past markers, or whether they acquire it long after they have acquired the past markers.

Also, there is a necessity to look at the child's acquisition of tense-aspect morphology from a different angle, such as analyzing how the input of caretakers has an effect on this acquisition. Discourse analysis of both the child's and the parents' use of tense/aspect is encouraged.

NOTES

1. Also classified as actions with clear end results (Antinucci & Miller 1976 and Bronckard and Sinclair 1973).
2. There are postverbal markings for progressive, but they only occur in questions and therefore are not included in this table, as only declaratives are considered in this paper. Many of these postverbal progressive markers came up in the parents' questions.
3. There were some blank parts on the tape of altogether 15 minutes.
4. Any speech sound produced by the child ranging from a single sound to a multiple-word-phrase or sentence is considered as an utterance. The morpheme-by-morpheme detailed and accurate transcription of the data was used to segment an utterance.
5. These are utterances containing the stative nature of the verb 'to be' manifested by the adjectival verb, e.g.,

   bông đẹp quá
   flower pretty too
   'The flower is (very/too) pretty.'
6. There were an additional 3 verbs in which *đang* did not occur. They were, however, coded as correct because the verbs used were of 'unaccusative' type, i.e., they do not require an explicit agent, such as *fall, flow, get spilled.* In Vietnamese adult speech, verbs of this type mostly do not require the progressive aspect marker.
7. The counting of past aspect markers excluded those utterances in which the child omitted the verb. These utterances were just N + Asp, such as *ngựa rồi* (horse Asp) with the intended meaning of 'rode horse'.
8. My interpretation of whether the child's intended meaning in an utterance is habitual, progressive, or perfective is based on discourse context. The surrounding utterances, especially the parent's responses, help in determining the appropriate tense/aspect intended by the child.
9. The classification of verbs in this table is based on Shirai and Anderson (1995, p.754-6). For some of the verbs that are not listed in Shirai and Anderson, I based the categorization on my own interpretation and inferences from Vendler's schema.
10. *Come* is arbitrary in classification: It has primarily been categorized as achievement, but some have argued that *come* can also belong to the accomplishment category. The child produced *come* + marker correctly 2x in the data and the remaining times without the marker (6 x, but these were repetitions).

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V. Second Language Studies

THE ACQUISITION OF ENGLISH LOCATIVE CONSTRUCTIONS BY KOREAN L2 LEARNERS

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ABSTRACT

The acquisition of argument structure has recently received considerable attention in SLA. This study seeks to add its findings regarding the knowledge of English locative constructions attained by Korean L2 learners to this line of inquiry. Following Bley-Vroman & Joo (2001) and Schwartz et al. (2003), an acceptability judgment test was administered to an adult group of Korean learners of English second language. The test consisted of sentences containing three different locative constructions: (a) the locative alternation, (b) PP-Omission, and (c) the Raising-to-Subject; these patterns were used to test for the existence of syntactic verb classes in the subjects' IL. The results are inconclusive regarding (c), but do provide evidence that Korean L2 learners can come to have principled, target-like knowledge of the English locative constructions (a) and (b).

1.0. INTRODUCTION

Over the past two decades, the acquisition of argument structure has received considerable attention in SLA research. Many studies, based on Pinker (1989), have focused on alternations in argument structure. While earlier studies investigated the dative alternation (Bley-Vroman and Yoshinaga, 1992; Inagaki, 1996; Wolfe-Quintero, 1992 to name but a few) more recent studies have looked at other alternations in argument structure, such as the locative alternation (Joo, 2000; Bley-Vroman and Joo, 2001; Juffs, 1996; Choi and Bowerman, 1991; Choi and Lakshmanan, 2002). Research on this topic is of real value to the field of SLA because it involves "such basic cognitive-linguistic concepts as acting, being affected, moving, changing, [and] causing," as well as more general areas of inquiry such as syntax-semantics associations and L2 epistemology (Bley-Vroman and Joo, 2001; Schwartz, Dekydspotter, and Sprouse, in press). The behavior of locative verbs in L2 learners' Interlanguage and the acquisition of the rules that govern their behavior is the focus of this paper.

2.0. LOCATIVE CONSTRUCTIONS

Locative verbs are those which denote the change of position of a substance, material, or set of objects (hereafter referred to as the *figure*, elsewhere called the theme or content) from some initial position onto or into some surface or container (hereafter referred to as the *ground*, elsewhere called the goal or container) (Pinker, 1989). Consider the following sentences with locative verbs:

(1) Alternating Ground-class
   a. Kama packed clothes into the suitcase.
   b. Kama packed the suitcase with clothes.

(2) Alternating Figure-class
   a. Nicole squirted water onto the wall.
   b. Nicole squirted the wall with water.

(3) Non-alternating Ground-class
   a. *Kama filled water into the bucket.
   b. Kama filled the bucket with water.

(4) Non-alternating Figure-class
   a. Nicole spilled coffee onto the floor.
   b. *Nicole spilled the floor with coffee.

For Pinker (1989), the acceptability of the sentences in (1), (2), (3a) and (4b) and the unacceptability of (3b) and (4b) are explained by the relationship between lexical semantics and syntax. Argument structure is mentally represented by *thematic cores*, or "schematization[s] of a type of event or relationship that lies at the core of the meanings of a class of possible verbs" (73). The two possible thematic cores for locatives are:

(5) X moves Y into/onto Z

(6) X causes Y to change its state by means of moving Z to Y

These schematizations can both be associated with two Broad Range semantic (conflation) classes of locative verbs: Figure-class and Ground-class (Choi and Lakshmanan, 2002). Figure-class verbs indicate the manner of motion by which the Figure moves into/onto the Ground, but not necessarily the end-state of the Ground. On the other hand, Ground-class verbs indicate the end-state of the Ground, after the Figure has been moved into/onto it. The associations between these two Broad conflation classes and the two possible thematic cores of locatives are mapped to syntactic structure via *linking rules*, which are "regular ways of mapping arguments onto grammatical functions ... by virtue of their thematic roles" (Pinker, 1989, 74). These linking rules, also known as Broad Range rules, can be clearly seen in (7) (adapted from Schwartz et al., 2002).

(7) Broad Range rules: Linking rules for locatives
a. Manner-of-motion meaning (Figure-class) $\leftrightarrow$ V NP_{Figure} PP_{Ground}
b. Change-of-state meaning (Ground-class) $\leftrightarrow$ V NP_{Ground} PP_{Figure}

However, these associations are neither exclusive, nor without exceptions. To explain this, Pinker looks to *lexical rules*, which associate one kind of lexical entry with another (in this case, one argument structure (5) with another (6)). It is the application of a lexical rule that associates the thematic core in (5) with the one in (6) and allows a verb to be linked to both of them. This ability of a verb to be linked to two thematic cores, thus two argument structures, and to appear in sentences with two different syntactic structures is what Pinker calls *locativization*, or the locative alternation. Some verbs are allowed to appear in both constructions, making them members of an alternating class comprised of verbs from both Broad conflation classes mentioned above, while other verbs are allowed to appear in only one of the constructions, making them members of a non-alternating class, also comprised of verbs from both Broad conflation classes. The application of the lexical rule that produces the locative alternation is constrained by a verb's membership in a more specific, Narrow conflation class, a semantically cohesive subclass of verbs. These constraints, Pinker's Narrow Range rules, delineate precisely which verbs can be linked to two argument structures, and thus be allowed to alternate. For the purposes of this paper, the key point is that locative verbs fall into one of four main classes: Alternating Ground-class, Alternating Figure-class, Non-alternating Ground-class, and Non-alternating Figure-class.

One more look at the examples in (1) – (4) will illustrate the locative alternation more clearly. While the verbs *pack* and *fill*, in (1) and (3) respectively, are both members of the 'broad' Ground-class, they are not members of the same Narrow conflation class. *Pack* is a member of a subclass of verbs specifying roughly that a mass is put into a container, so that the container might perform its function. This subclass of verbs (e.g., *load* and *stock*) is also part of the alternating class of verbs. *Fill* on the other hand, while also a Ground-class verb, is a non-alternating verb due to its membership in the 'narrow' class of verbs specifying that a surface is completely covered by a layer, either liquid or solid (e.g., *douse*, *cover*, *pave*). The verbs *squirt* and *drip*, in (2) and (4) respectively, are both Figure-class verbs, but like *pack* and *fill*, are members of different subclasses. *Squirt* belongs to an alternating subclass denoting ballistic motion of a mass in a specified spatial distribution, whereas *drip* belongs to a non-alternating subclass denoting a mass being enabled to move via gravity. Moreover, locative verbs can be divided into four groups, as seen in (1) – (4): alternating Figure-class, alternating Ground-class, non-alternating Figure-class, and non-alternating Ground-class.

Another feature of the locative alternation which needs to be addressed is its constructional meaning. The well documented constructional meaning of locatives is known as the object-holism effect, hereafter called the *Holism Effect* (Anderson, 1971; Bley-Vroman & Joo, 2001; Choi & Lakshmanan, 2002; Pinker, 1989), by which a Ground-NP, but not a Figure-NP, in direct object position is to be interpreted as being entirely affected; this interpretation does not hold for Ground-PP's in locative constructions. For example, in (1b) the suitcase is understood to be completely packed with clothes, while in (1a), there may be room left for more clothes; in (1a), there is no sense of the extent to which the suitcase is full. The 'Holism Effect' is not the focus of this study, but its presence as the focus of previous studies played a role in prompting the research questions of the current study.

While Broad Range rules and the constructional meaning of locative constructions exist cross-linguistically, Narrow Range rules and association of the 'Holism Effect' with certain constructions is thought to be language-particular (Pinker, 1989; Joo, 2000; Bley-Vroman & Joo, 2001; Schwartz et al., 2003). Before proceeding further, a look at what is known about Korean locatives is necessary. In what they called a preliminary analysis, Bley-Vroman & Joo (2001) explained that their results showed the presence of a 'figure-meaning' group, a 'ground-meaning' group, and an 'alternating-meaning' group, but that Korean locative verbs were not classified into these groups in the same way that English locatives are. They also claimed that the Holism Effect existed in Korean and that its interpretive effects seem to follow the same patterns as they do in English. Choi and Lakshmanan (2002) also looked at the acquisition of locatives by Korean learners of English. Table 1, adapted from their study, serves as a clear comparison of the differences in the behavior of locatives in English and Korean. Of significance is that Korean and English differ in which verbs (classes) they allow to alternate.

Table 1: Locative Verbs in English and Korean

	English		Korean	
	Alternating	Non-alternating	Alternating	Non-alternating
Figure-class	X	X		X
Ground-class	X	X	X	

Examples of how Korean locatives behave differently from English are seen in sentences in (8) and (9), also adapted from Choi and Lakshmanan (2002).

(8) Figure-class verbs

a. *Yeonghee-ka* *namwu-e* *mwul-ul* *ppwuli-ess-ta*
Yeonghee-NOM tree-LOC water-ACC spray-PAST-DECL
'Yeonghee sprayed water onto the tree.'

b. **Yeonghee-ka* *mwul-lo* *namwu-ey* *ppwuli-ess-ta*
Yeonghee-NOM water-WITH tree-ACC spray-PAST-DECL
'Yeonghee sprayed the tree with water.'

(9) Ground-class verbs

a. *Yeonghee-ka* *mwul-lo* *khep-ul* *chaywu-ess-ta*
Yeonghee-NOM water-WITH glass-ACC fill-PAST-DECL
'Yeonghee filled the glass with water.'

b. *Yeonghee-ka* *khep-ey* *mwul-ul* *chaywu-ess-ta*
Yeonghee-NOM glass-LOC water-ACC fill-PAST-DECL
*'Yeonghee filled water into the glass.'

What we are seeing in (8) is that the Ground-class verb *ppwuli-ta* (spray) is not allowed to alternate; it can only occur with Figure-NP in direct object position (i.e., with a *Figure-frame*). In English, *spray* is allowed to alternate. In (9), we can see that the Figure-class verb *chaywu-ta* (fill) is allowed to alternate; it can occur with a Figure-NP in direct object position or with a Figure-PP (i.e., with a *Figure-frame* or *Ground-frame*, respectively). This may or may not cause problems for Korean speakers learning English, however, it does suggest that whatever knowledge of English locatives Korean-speaking L2ers do have does not come from their L1.

3.0. PREVIOUS STUDIES

Given the complexity and the subtlety of the rules governing locative alternation, and that they are language-particular, one wonders whether L2 learners can acquire target-like use of locatives, and if so, how? A few of the related studies mentioned above have shed some light on these questions, however, in doing so they have raised yet more questions. Of special interest here are Joo (2000), Bley-Vroman and Joo (2001), Choi & Lakshmanan (2002), and Schwartz et al. (2003).

Bley-Vroman and Joo (2001), based on research carried out by Joo (2000), investigated and discussed Korean speaking L2 learners' acquisition of both the 'Holism Effect' and of the Narrow Range rules governing locative alternation. Joo's subjects were divided into three groups; two were comprised of native Korean speakers and one of native English speakers. There were 17 in the native English speaking group (NSE), 59 in the group of Korean L2 learners whose knowledge of English locatives was under investigation, and 16 in the third group of native Korean speakers whose knowledge of Korean locatives was under investigation. To examine their subjects' knowledge of these two features of locative constructions, two forced-choice picture-description tasks were used. The first task presented subjects with a sentence with a locative verb occurring in either a Ground-frame or a Figure-frame. Both Ground-class verbs and Figure-class verbs were used in both locative constructions (Ground-frame and Figure-frame), so some sentences were grammatical and some were ungrammatical. The subjects were to read the stimulus sentence and then choose which picture strip (of two given) best illustrated that sentence. In the second task, subjects were presented with only one picture strip, but two sentences, and were to choose which sentence (either the Ground-frame or Figure-frame) best represented the picture. Again, some sentences were grammatical and some were ungrammatical. On the basis of Joo's results, Bley-Vroman and Joo concluded that their subjects did have knowledge of the constructional meaning of the English locative (i.e., the 'Holism Effect'), but did not have target-like knowledge of the Narrow Range verb classes. Furthermore, they claimed that "Korean learners show[ed] no effect for narrow verb class," (Bley-Vroman & Joo, 2001: 207) and "did not distinguish which group the verbs belonged to" (Joo, 2000: 56). From this, according to Schwartz et al. (2003), it follows that locative verbs in Korean L2 learners' Interlanguage (IL) all fall into one large alternating class.

In addition to the problem of testing two features of the locative construction using a task designed to sufficiently test only one (i.e., the 'Holism Effect'), Schwartz et al. (2003) point out a few other flaws in the task used in Joo (2000). They explain that it tests interpretive effects, but not grammaticality; the task worked very well in providing evidence related to the 'Holism Effect', but only to that. More specifically, Schwartz et al. explain that the results provide "no direct evidence bearing on which sentences the L2ers take to be grammatical vs. ungrammatical" (6). Furthermore, a reexamination of the results showed that the subjects did in fact make a distinction in their selection of Ground/Figure-frames in the second task, but not in the first task, which means that the two versions of the forced-choice picture-description task yielded different results. The final relevant point is the possibility that contextual coercion played a role in Joo's subjects' picture-sentence matching task. Coercion, also seen in child L1 acquisition (Pinker, 1989), is a phenomenon in which context can force an expression to be used beyond the normal use restricted by its lexical semantic restrictions. This may play a role in adult L2 acquisition, for example, when a learner may have target-like representations of a verb, but uses it beyond its restrictions in certain situations such as *forced*-choice picture-description task. Schwartz et al.'s reanalysis serves as the major conceptual and methodological background for the current study.

The final relevant study that deserves attention is Choi & Lakshmanan's (2002) investigation of Korean-English bilingual's acquisition and interpretation of locatives. Their study involved both a picture-description task and a grammaticality judgment (GJ) task. Of interest here is the GJ task, which served as their pretest. Due to their interest in learners advanced enough to be considered bilingual, they used a 40-item GJ task including 20 distracters and 20 tokens from each of the four locative verb classes described above in (1) – (4). The results of this task are shown in Table 2, adapted from Choi & Lakshmanan (2002). If we are to accept slight variance in the native-speaker means and ranges as representative of subjects who have acquired the locatives, we must also accept that of the Korean-speaking group. Here, a GJ task appears to have served the purpose of assessing knowledge of English locative verb classes.

Table 2	Advanced Group			Native Speakers		
	Mean	SD	Range	Mean	SD	Range
Non-alt. Figure	5.78	0.44	(5-6)	5.70	0.48	(5-6)
Non-alt. Ground	5.33	0.50	(5-6)	5.70	0.67	(4-6)
Alt. Figure	3.11	0.33	(3-4)	4.00	0.00	(4-4)
Alt. Ground	3.22	0.44	(3-4)	4.00	0.00	(4-4)

4.0. THE CURRENT STUDY

4.1. RESEARCH QUESTIONS AND HYPOTHESES

Given the discrepancies between the methods and results of the studies described above, the verdict is still out on Korean L2 learners' knowledge of English locatives. The questions still remain:

(10) What knowledge of English locative verbs do Korean native speakers learning English have?

(11) Do Korean native speakers learning English differentiate between locative verbs in their IL, and if so, in what ways?

To answer these questions, Schwartz et al. (2003) argue that GJ tasks should be used to investigate Korean L2 learners' knowledge of rules governing the argument structure of locative verbs. They suggest looking beyond the heretofore examined knowledge of the locative alternation to other syntactic behaviors of the argument structures of locative verbs, in order to further examine whether or not these verbs do in fact behave like a class in terms of other possible syntactic behaviors. Two of the tests they suggest are below in (12) – (13), and are adapted from Kim (1999).

(12) Test 1: PP-omission
- a. *Nicole dripped the floor (with juice).
- b. Nicole dripped juice (onto the floor).
- c. *Kama flooded water (into the basement).
- d. Kama flooded the basement (with water).
- e. Kama packed the suitcase (with clothes).
- f. Kama packed clothes (into the suitcase).

(13) Test 3: Raising-to-Subject
- a. *The floor dripped with juice.
- b. Juice dripped onto the floor.
- c. *The water filled into the basement.
- d. The basement filled with water.
- e. *The suitcase packed with clothes in a few minutes.
- f. The clothes packed into the suitcase in a few minutes.

Thus, in addition to a test consisting of items similar to those in (1) - (4), which will examine the "locative alternation," two tests composed of items similar to those in (12) and (13) will be administered in this study. The hypotheses below were chosen for two reasons: 1) to serve as tests of the conclusion made by Bley-Vroman & Joo (2001) that for Korean speaking learners of English "principled knowledge of narrow [verb] classes is difficult or impossible to attain" (216) and 2) to serve as a starting point for discussing the results of the new tests of Korean L2 learners' knowledge of locatives.

(14) Hypotheses
- 1: No principled distinctions will be made among the classes of locative verbs on the "locative alternation" test items. This predicts the results from test items like (1) – (4).
- 2: No principled distinctions will be made among the classes of locative verbs on the "PP-Omission" test items; both non-alternating Figure-class verbs and non-alternating Ground-class verbs will be allowed to 'drop' the Ground-PP and Figure-PP, respectively, as will both alternating classes. Subjects will accept sentences like (12a) and (12c) just as they will (12b) and (12d-f). This predicts the results of (12).
- 3: No principled distinctions will be made among the classes of locative verbs on the "Raising-to-Subject" test items; these items will be acceptable with both non-alternating and alternating verb classes and will pattern like alternating verbs do (e.g., (14e-f)). This predicts the results of (13).

4.2. SUBJECTS

The L2 learner subjects in this pilot study were five adult Korean learners of English. Five were graduate students at the University of Hawai'i at Manoa. All reported having studied English for 9-11 years. Their average time spent in the U.S. was 1 year. TOEFL scores ranged from 600-650. A group of five adult native speakers of English from the continental United States was also included in order to provide native speaker judgments with which to compare the Korean L2 learners' responses.

4.3. PROCEDURE

The subjects were first given a pre-test, consisting of a picture-verb matching exercise to make sure that lack of knowledge or familiarity with the verbs was not a factor in the subjects' task performance. The subjects were given a 72-item forced-choice acceptability judgment task, in which they were asked to assign each item a degree of acceptability between -2 and 2. No option was given to allow the subjects to choose "I do not know" or "I am not sure." This scale was chosen over a simple acceptable/unacceptable choice to account for variability in the subjects' grounds for assessing acceptability. This decision also reflects the fact that some sentences seem somewhat strange, especially without context, but are nonetheless acceptable. They were given as much time as they needed to complete the test, but were encouraged to answer each item quickly and move on to the next; they were asked not to go back and change their answers after they had marked them. This request was made to ensure that subjects did not change their judgments for one sentence to resemble their judgment of a similar looking sentence later on; it is desirable for the purposes of this test that each sentence be judged independently. Along these lines, the test items were also presented in semi-random order, so that similar looking sentences were not grouped together.[1] Twelve verbs were used on the test: three verbs for each of the four classes shown in (1) – (4). There were three "tests", or sentence types, testing each of the three constructional behaviors shown above: the locative alternation, PP-omission, and Raising-to-Subject. Each of the 12 verbs appeared in two sentences on each of three tests for a total of 72 items.[2]

4.4. RESULTS

As noted above, the starting point for discussing the findings will be Hypotheses 1-4 (see (15) above). As will be shown below in a more detailed discussion of the findings as they relate to hypotheses, the Korean L2ers not only made principled distinctions between locative verbs, they did so in patterns strikingly similar those of the native speaker group (NSG, or NS for native speaker).

Hypothesis 1 was not supported. In terms of locativization, the KSG made distinctions between alternating and non-alternating verbs, and they did so along lines that clearly follow the patterns predicted by verb classes (see Figure 1). They judged as acceptable both alternating Ground- and Figure-class verbs in both Ground- and Figure-frames with very little variation, as did the NSG. They also made distinctions between the possible patterns in which the non-alternating verbs can occur based on the Ground/Figure distinction, as did the NSG (compare Figure 1 with Figure 2). The one exception here is that the KSG judged non-alternating Figure-class verbs in Ground-frames (e.g. *Kama spilled the carpet with coffee.*) to be approximately 60% less unacceptable than did the NSG, and they showed considerable variation in their judgment of this sentence type (see the bolded values in Table 4, Appendix). At first, this exception caused alarm, in light of a proposed universal that *pour*-class Figure verbs allow only Figure frames (Kim, 1999). A closer look at the data shows that for sentences with *pour* the learners did not in fact violate the universal (Table 5, Appendix).

Figure 1

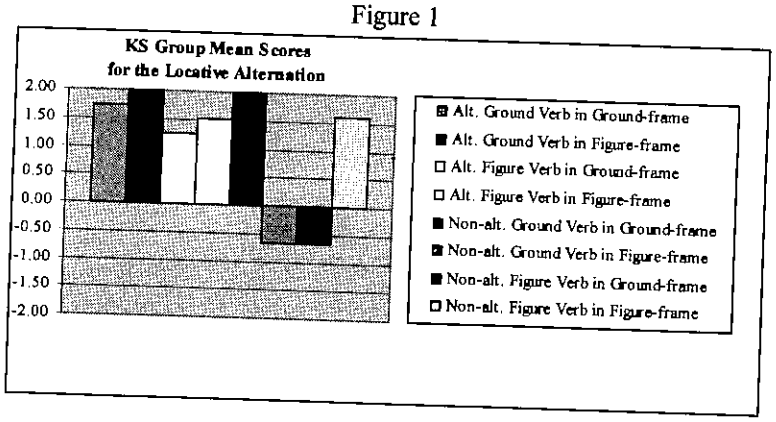
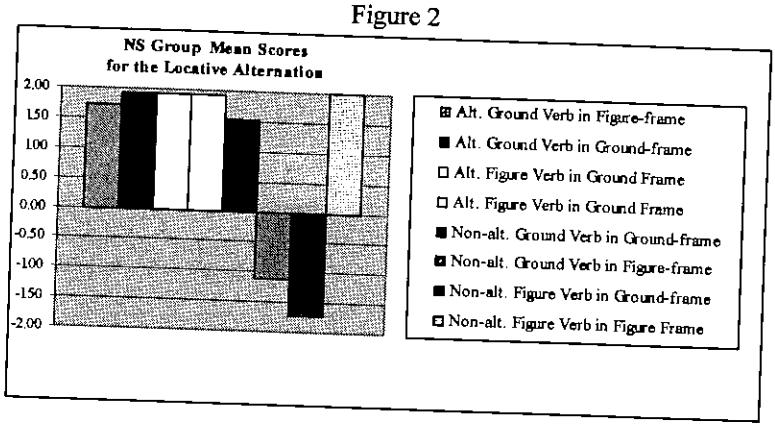


Figure 2



Hypothesis 2 was not supported. As seen in Figure 3 and Figure 4, the KSG allowed alternating Ground- and Figure-class verbs to occur in both Ground-PPs and Figure-PPs omitted, as did the NSG. Furthermore, on the test items for PP-omission, the KSG differentiated between non-alternating Ground- and Figure-class verbs. They allowed only sentences with Ground-class verbs to occur with the Figure-PP omitted (i.e., a Ground-NP in the Direct Object (DO) position) and only sentences with Figure-class verbs to occur the Ground-PP omitted (i.e., a Figure-NP in DO position). Apparently, like the NSG, they found it unacceptable to allow a "mismatch" between the classes of the verb and DO. Both groups' judgments show the following pattern: Ground-class verbs may take Ground-NPs as DOs, but not Figure-NPs, while Figure-class verbs may take Figure-NPs as DOs, but not Ground-NPs. It should be noted, however, that the KSG's mean judgment of the sentences with alternating Figure verbs with Ground-NPs in DO position was quite low compared with the NSG group (see Table 2 and the "yellow bar" in Figure 3). Given the small n-size and a range of only 4 points on the Likert scale however, this should not be taken as evidence against knowledge of the verb classes, especially in light of the individual results.

Hypothesis 3 was supported. The KSG did not appear to make any principled distinctions between alternating and non-alternating verbs, nor did they accept all the sentences with the causative-inchoative alternation (in which either the Figure-NP or the Ground-NP is "raised to subject" position) according to the pattern predicted in (13). The only similarity (albeit a weak one) is that for three of the four verb classes, both the KSG and the NSG judged sentences with Figure-NPs in Subject position to be more acceptable than those with Ground-NPs in Subject position. The one verb class exception was the non-alternating Ground-class verbs, for which both groups showed the reverse pattern.

Figure 3

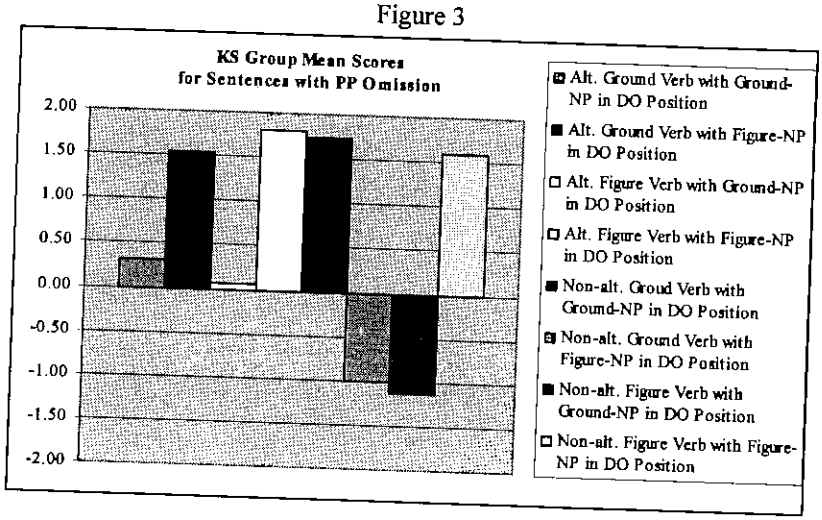
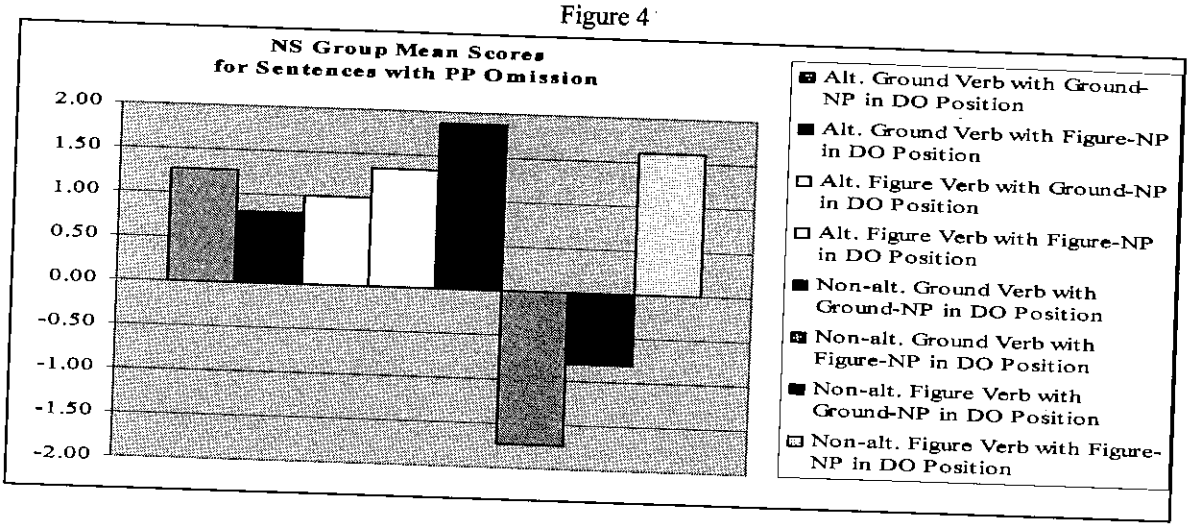


Figure 4



While these results seem to offset the impressive similarities in judgments seen in Figures 1-4, the lack of conformity within both groups and between groups is likely the result of a flaw in the design of these test items. It was believed that each sentence of this type needed a PP showing duration of the action (e.g. *The clothes packed into the suitcase in a few minutes.*). This type of addition made many of the sentences quite awkward because it is difficult to imagine a context in which they would be used. Furthermore, the additional 'time phrase' may have seemed to conflict with the tense of the verb in each sentence. In the sentence *The bucket filled with water in five minutes* could be interpreted as *The bucket filled with water* (past) and *in five minutes* (future: in five minutes from now). A final possibility is that these items were seen as ill-formed passives. Any or all of these problems may have plagued most of the sentences of this type. Removing the additional PP's, and replacing them with Adverbial Phrases when appropriate, should help to avoid this problem in the main study (e.g. *The bucket filled with water quickly.*). For these reasons, figures are not given for these item types and they are not included in the individual results below, as they are not accurate tests of the verb classes.

The individual results further illuminate the KSG's knowledge of locative verb classes in English. Figure 5 shows the combined percent correct, based on the NSG's confirmation of the verb classes, on both the Locative Alternation and PP-Omission items. Their percentages range from 81% to 96%, all above the level that was argued above to be acceptable as "native-like" in Choi & Lakshmanan (2002). Table 3 shows the individual scores for each verb class on both the alternation and the PP-Omission items. Only 1 subject on only one verb class scored below 4 out of 6.

Figure 5

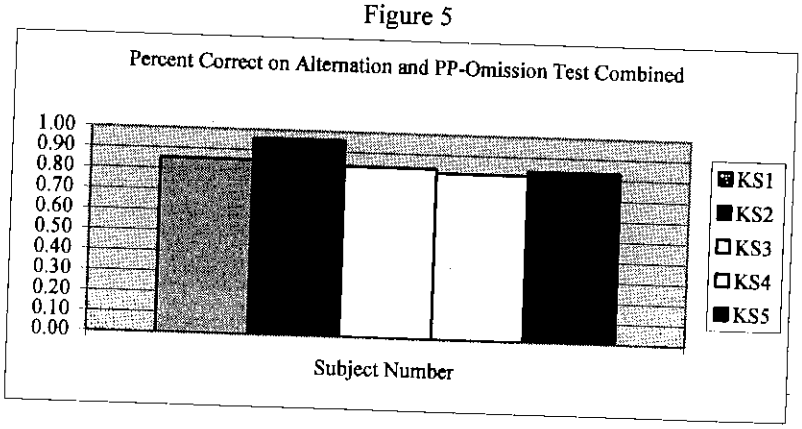


Table 3: Correct Score out of 6	K1	K2	K3	K4	K5
Locative Alternation					
Alternating Ground-class verbs	5	6	6	6	6
Alternating Figure-class verbs	5	6	5	5	5
Non-alternating Ground-class verbs	4	6	5	4	6
Non-alternating Figure-class verbs	5	6	4	4	5
PP Omission					
Alternating Ground-class	6	6	6	6	4
Alternating Figure-class	6	6	4	4	3
Non-alternating Ground-class	5	4	5	5	6
Non-alternating Figure-class	5	6	5	5	5

5.0. DISCUSSION

Moreover, the findings in this study soundly disconfirm Hypotheses 1 and 2, and provide inconclusive evidence regarding Hypothesis 3. This lends support to the criticism of Bley-Vroman & Joo (2001) by Schwartz et al. (2003).[3] More specifically, the Korean L2ers in this study *did* differentiate between alternating and non-alternating verbs along lines delineated by Ground- and Figure-classes in terms of their behavior in tests of locativization, PP-omission. The significance of these findings is that they show not only that it was possible for these Korean L2 learners to make principled distinctions among locative verbs and constructions, but that they were able to make very similar principled distinctions, as those made by native English speakers.

While the stated objectives and scope of this pilot study are limited to what knowledge Korean learners of English have of locative constructions, a brief discussion of the possible explanations is warranted. Given that the subjects did not demonstrate explicit knowledge of the specific narrow classes of locative verbs and the behaviors they are claimed to determine[1], it seems that two possible explanations deserve attention. The first is that the KSG group in this study simply had more exposure than the subjects in Joo's study. This explanation seems to rest on the beliefs that a) more input and interaction in the target-language environment facilitates acquisition and that b) these facilitate acquisition because they provide a greater chance for a higher frequency of these verbs to occur in the input and interaction, thus a greater chance for rule-formation[4] or, if you prefer, generalization. The problem with this line of reasoning, for certain theories, is that the narrow range constraints on locative constructions may not be "easily perceived in L2 exposure" and "the determination of [these constraints] may require something like noticing nonoccurrence" (Bley-Vroman & Joo, 2001: 216). Given the success of the KSG group, however, this potential difficulty in noticing may not be a factor after all.

Bley-Vroman & Joo (2001) acknowledged a second explanation in the possibility of the Full Transfer/Full Access Hypothesis (Schwartz & Sprouse, 1996) thus indirectly allowing a possible explanatory role for Universal Grammar. This might resemble something like Pinker's (1989) account of the learning mechanisms, one likely meant to fit somehow into the framework of UG. It is still unclear how specific lexical items, such as individual locative verbs, might be acquired along with their possible behaviors, such as the constructions in which they are allowed, or how this acquisition fit into any current theory of SLA. It does seem at least somewhat plausible, though that these phenomena could be accounted for by UG. Furthermore, it seems possible that these locatives are acquired in such a way, via exposure to L2 input and interaction, that the extent to which a learner is exposed would roughly correspond to the extent to which that learner has acquired the locative and its semantic/syntactic properties. As the answer to whether or not target-like knowledge of locative verbs can be acquired appears to be yes, further investigation is needed to determine how this knowledge is attained and what the nature of its development is.

NOTES

I would like to give a special thanks to Bonnie D. Schwartz for her insightful guidance, constructive criticism, and (lengthy) office-hour sessions. I would also like to thank Dick Schmidt and Craig Chaudron for their helpful suggestions. Any errors are mine alone.

1. This was not easily avoided, however, and one subject reported having noticed the groupings. That subject continued to explain that noticing similar sentences did not help her/his judgment because s/he "didn't know which verb belonged to which class." This knowledge of the concept of verb classes could be said to have a negative effect on the results of this study. However, it is unlikely that a

learner would be able to memorize all of the narrow range classes that are theorized to exist along with their allowed argument structure representations. Furthermore, on the survey neither this subject nor any of the others reported having such knowledge or having been able to apply any rules using such knowledge. Even if this were the case, this study investigates what knowledge the learners have, *not* whether they will behave like native speakers in the absence of any conscious metalinguistic knowledge of that behavior. That learners could potentially learn the verb classes, thus the behaviors of locatives from that knowledge, would actually support the conclusions of this study: that L2ers can obtain principled knowledge of locatives.

2. Two potential problems with the instrument used must be noted, both of which could have had the effect of subjects noticing patterns in the test items. First, there were no distracters. Second, the items were presented in a list, not independently. Both of these problems are being dealt with in the design of a new instrument, which will likely shed more light on this issue.

3. This part of the conclusion must be tempered by two facts: 1) the task in Joo (2000) did not really assess acceptability judgments, and 2) the subjects in this study were different from those in Joo's study in terms of proficiency (as gauged by TOEFL scores: Joo's subjects ranged from 550-650, whereas the KSG group's scores ranged from 600-650) and exposure to the target-language environment (Joo's subjects were in Korea, whereas the subjects in the current study were in the United States).

4. Here, *rule-formation* could be that described by many models of language acquisition. All require some kind of input, thus a higher frequency of a particular feature of language would lead to greater chances that that feature would be either noticed, or at least somehow "taken in" and utilized by whichever language acquisition device one believes in.

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APPENDIX

Table 4: Mean Judgments of Verbs in Frames

Locative Alternation	KS		NS	
Alternating Ground-class	m	sd	m	sd
Ground-frame	1.73	0.31	1.73	0.31
Figure-frame	2.00	0.00	1.93	0.12
Alternating Figure-class				
Ground-frame	1.27	0.70	1.93	0.12
Figure-frame	1.53	0.46	1.93	0.12
Non-alternating Ground-class				
Ground-frame	2.00	0.00	1.53	0.50
Figure-frame	-0.67	0.31	-1.13	0.64
Non-alternating Figure-class				
Ground-frame	-0.67	1.29	-1.73	0.12
Figure-frame	1.60	0.35	2.00	0.00

Table 5: Mean Judgments of Verbs in Frames

PP Omission	KS		NS	
Alternating Ground-class	m	sd	m	sd
Ground-NP in DO position	1.67	0.31	1.27	1.27
Figure-NP in DO position	1.53	0.42	0.80	1.25
Alternating Figure-class				
Ground-NP in DO position	0.07	0.61	1.00	0.53
Figure-NP in DO position	1.80	0.20	1.33	0.42
Non-alternating Ground-class				
Ground-NP in DO position	1.73	0.46	1.87	0.23
Figure-NP in DO position	-1.00	0.87	-1.73	0.31
Non-alternating Figure-class				
Ground-NP in DO position	-1.13	0.90	-0.80	1.11
Figure-NP in DO position	1.60	0.53	1.60	0.69

ON THE DISTRIBUTION OF CASE MARKER DROP IN JAPANESE*

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ABSTRACT

In this paper, I critically examine the distribution of case marker drop (henceforth CMD) in Japanese and report that (1) case marker drop is not motivated by semantic conditions such as specificity, and that (2) the Accusative marker *o* can be dropped anywhere as it represents an inherent Case[1], whereas the Nominative marker *ga* cannot be dropped because it has the property of structural Case. It is argued that only this account is compatible with the fact that *ga*-drop is not licensed inside complex NP whereas *o*-drop is.

1.0. INTRODUCTION

It is well known in the Japanese syntax literature that the case marker can be dropped in spoken Japanese. Takezawa (1987) first reported that the Accusative case marker *o* in (1a) can be dropped when it is adjacent to the verb that c-commands it (1b), whereas Nominative marker *ga* (1c) or Accusative marker on the scrambled object (1d) is not allowed to drop. On the other hand, Kuno (1973) and Miyamoto, Wexler, Aikawa & Miyagawa (1999) observe that the topicalized object (i.e. object moved to the Topic phrase above IP) can lack its particle since topic marker *wa* can always be dropped (1e), although somewhat obligatorily resulting in having a specific referent.

(1) a. Taro-ga pasokon-o katta[2] (Canonical SOV order)
Taro-NM computer-AC[3] bought
'Taro bought a computer'

b. Taro-ga pasokon-Ø[4] katta
Taro-NM computer bought
'Taro bought a computer'

c. *Taro- Ø pasokon-o katta
Taro computer-AC bought
'Taro bought a computer'

d. *[IP pasokon-Ø [IP Taro-ga *t* katta]] (Scrambled order)
computer Taro-NM bought
'Taro bought a computer'

e. [Top pasokon-Ø [IP Taro-ga *t* katta]][5] (object topicalization: +specific)
computer Taro-NM bought
'As for the computer, Taro bought it.'

Semantic and syntactic accounts for the licensing of CMD have been proposed with regard to the obligatory suppliance or optional drop of case markers. In the remainder of the paper, I will critically examine these accounts to point out their problems, and propose a new account for the distribution of CMD which rests on the idea that the Accusative marker *o* represents an inherent Case in Japanese (e.g. Fukui & Takano, 1998). Organization of the paper is as follows: Section 2 presents a critical examination of semantic accounts suggested by Yoo, Kayama, Mazzota & White (2001) and concludes that Japanese case marker does not have semantic functions to determine specificity (Enç, 1991). Section 3 addresses the inadequacy of the previous syntactic accounts for CMD, and suggests that the distribution of CMD can be accounted for by the nature of abstract Case associated with the case markers: namely, structural Case for Nominative *ga* and inherent Case for Accusative *o*. Section 4 provides a conclusion.

2.0. SEMANTIC APPROACH: SPECIFICITY CONDITION

Enç (1991) reported that Turkish Accusative case maker is supplied when the referent of the object is specific ([+ specific]), although it is dropped when the object has a non-specific, generic referent ([-specific]). Similar semantic functions of case marker are found in Tamil as well (Pillai, 1992; Schiffman, 1999), although in Tamil such functions are limited to inanimate objects.

2.1. TEST OF SPECIFICITY CONDITION ON OBJECT

Based on these observations, Yoo et al. (2001)[6] argued that Japanese Accusative case marker *o* also determines specificity of object: i.e. object with Accusative case marker can be either [+ specific] or [- specific], whereas object without case marker allows only [- specific] reference.

They conducted a 'story task' to examine the validity of their claim. They provided a discourse context that forces a certain noun to have specific referent, followed by a response to the discourse by an imaginary interlocutor introduced in the context. (2) is an example of the task (Yoo et al., 2001: p. 830):

(2) *Contrastive/specific context without case marking
Bill's birthday was coming. Sue was going to give him a gift. Bill reminded Sue that he wanted a new watch. However, on his birthday, Sue said,

*Seetaa-Ø	ande-ageta	no	yo
Sweater	knit-did (for you)	PT	PT

"I knitted a sweater for you."

Their prediction was that the subjects would judge the response as inappropriate when given a discourse context above, since the object lacks case marker even though it has a specific referent (i.e. "The sweater that Sue was knitting") set by the discourse context. The results show that there was no significant difference between the acceptable and unacceptable conditions, which clearly indicate that what Yoo et al. claimed to be unacceptable was in fact as acceptable as other grammatical conditions regardless of the presence or absence of the case marker. In other words, object with and without case marker can be either [+ specific] or [- specific]. The results strongly suggest that the case marker in Japanese does not play any semantic function regarding specificity.

2.2. TENTATIVE SOLUTION TO SPECIFICITY CONDITION IN JAPANESE: DISCOURSE TOPIC

The results of the story task in Yoo et al. suggested that the case marker does not play a role in determining specificity of object. Then it is important to address what it is that determines the specificity of the object. I tentatively propose, following Huang's proposal (1984), that what determines the specificity of the object is the null discourse topic (3):

(3) Null Topic binding condition on specificity (tentative):
Null Topic binds the referent variable *x* of overt object and assigns specificity to it.

In order to illustrate how the generalization holds, observe the following example of a conversation between two imaginary speakers[7]:

(4) Speaker A:

boku-wa	kono	kurasu-no	kyookasyo-o	mada	katte-nai-ya
I -TP	this	class-GN	textbook-AC	yet	buy-NEG-PT

"I haven't bought the textbook for this class yet."

Speaker B:

John-wa	moo	kyookasyo-Ø	katta	rasii-yo	(object: [+ specific])
John-TP	already	textbook	bought	I-heard-PT	

"I heard that John had already bought the textbook (for the class)."

In this context, even though the object '*kyookasyo* (textbook)' in Speaker B's utterance lacks Accusative case marker, it obviously has a specific referent: i.e. 'the textbook for the class that they are registered for'. This indicates that specificity is somewhat subject to the discourse context that is provided in advance to the utterance. Notice that this situation is similar to the null topic binding of the *pro* (5) in the discourse prominent languages, such as Chinese and Japanese.

(5) Speaker A: Shei kanjian-le Zhangsan ?
Who saw Zhangsan
"Who saw Zhangsan?"
Speaker B: [$_{Top}$ e_i] [Zhangsan shuo Lisi kanjian-le e_i]
Zhangsan say Lisi saw
"Zhangsan said Lisi saw him"

(Huang, 1984: p. 542)

In (5), the identity of the empty category in the object position can be recovered at LF and hence comprehended as 'Zhangsan'. Huang (1984) attributed this way of identification to the presence of null topic, which binds the empty category and assigns a specific referent to it. Given the similarity of the identification process observed in (4) and (5), it seems conceivable to claim that there is a similar mechanism in operation, namely, null topic binding as generalized in (3).

However, the validity of generalization (3) needs much further work, which far exceeds the scope of this paper. What has to be noted here is that the object with and without case marker can be either [+ specific] or [- specific], which suggests that case marker in Japanese plays no role in determining specificity of nouns. We will come back to this issue in the next section.

3.0. SYNTACTIC APPROACH: ECP ACCOUNT

Based on the observation in (1), Fukuda (1993) proposed that the case marker is dropped only when it is licensed by the Empty Category Principle (ECP), defined in Chomsky (1986: p. 17) as follows:

(6) Empty Category Principle:
A nonpronominal empty category must be properly governed.
α properly governs β iff α θ-governs β or antecedent-governs β.

Assuming that the Japanese case marker is a head of functional projection 'K(ase) P(hrase)[8]' whose head K is a morphological realization of abstract Case feature (Bittner & Hale, 1996; Fukui, 1995; Fukui & Takano, 1998), Fukuda proposed that the empty K is licensed when it is head-governed by a proper governor. This accounts for the contrast between (1b), (1c) and (1d), repeated below as (7a), (7b) and (7c).

(7) a. Taro-ga pasokon-Ø katta (Canonical SOV order)
Taro-NM computer bought
'Taro bought a computer'
b. *Taro-Ø pasokon-o katta
Taro computer-AC bought
'Taro bought a computer'
c. *[$_{IP}$ pasokon-Ø [$_{IP}$ Taro-ga *t* katta]] (Scrambled order)
computer Taro-NM bought
'Taro bought a computer'

In (7a), the empty K (i.e. the dropped case marker 'Ø') is licensed as it is directly head-governed by the verb '*katta* (bought)', whereas in (7b) the potential governor I is not available since "the empty head K, being in the Spec of I, is not within the intermediate projection of I, a head of IP (Fukuda, 1993: 170)", and in (7c) there is no proper governer for the empty K, thus resulting in ungrammaticality.

3.1. PROBLEMS WITH THE ECP ACCOUNT

I claim that the ECP account of CMD suffers from both conceptual and empirical problems. One conceptual problem is that there remains a problem with Case representation even when the empty K is licensed by ECP. In other words, if K is truly a morphological realization of abstract Case feature, then this Case feature must somehow be recovered at LF in order to avoid violation of visibility condition, which requires that all NPs must receive abstract Case to be assigned a thematic role. However, Fukuda never addresses how the Case feature can be recovered nor does he provide a solution to the visibility condition. Another problem is that such

an unnatural, theory – internal stipulation as 'government' is excluded in the current grammatical theory (Chomsky, 1995), and thus it is rather ideal to find a solution without recourse to such a stipulation[9].

In addition, there are empirical data that cannot be explicated by Fukuda's approach. Firstly, the results of grammaticality judgment task reported in Yoo et al. (2001) show that native speakers do in fact accept scrambled object without case marker as grammatical: Even though the ungrammatical 'NP NP-wa V' order is considered significantly less acceptable than the 'NP-wa NP V' condition, this order is still seen as significantly more acceptable than the ungrammatical distractors. Rather low acceptance of grammatical 'NP-wa NP V' condition indicates that the modality of the test (written Japanese) may not be appropriate to test CMD in that this phenomenon is observed only in spoken Japanese. However, the data are still informative in that the supposedly ungrammatical condition which has a scrambled object without case marker is not necessarily rejected as ungrammatical. This result clearly contradicts with Fukuda's analysis.

Secondly, Ueda observes that sentence (8) is grammatical even though it contains an object without a case marker that is not head-governed by V, which also contradicts with Fukuda's analysis:

(8) Bill-ga nani-Ø hosoku kezutta-no? (Resultative construction)
Bill-NM what thin scrape-Q
"What did Bill scrape thin?"
(Ueda, 1993: 12)

Finally, (9) shows that CMD on scrambled object can be found, somewhat surprisingly, within complex NP and relative clause in which topicalization is not permitted (Kuno & Takami, 1993), as in (10):

(9) a. [[pasokon-Ø Taka-ga katta] jijitu-o] John-wa sira-nakatta (CP complement)
computer taka-NM bought fact-AC John-TP knew-NEG
"John didn't know the fact that Taka bought a computer."
b. [[kyookasyo-Ø Taka-ga ageta] tomodati-ga] kaban-o nakusita (Relative Clause)
textbook Taka-NM gave tomodati-NM bag-AC lost
"The friend that Taka gave a textbook lost his bag"

(10) a. [[Taka-ga / *-wa pasokon-Ø katta] jijitu-o] John-wa sira-nakatta (Complex NP)
Taka-NM/*TP computer bought fact-AC John-TP knew-NEG
"John didn't know the fact that Taka bought a computer."
b. [Taka- ga / *-wa kyookasyo-Ø ageta tomodati-ga] kaban-o nakusita (Relative clause)
Taka-NM/*TP textbook gave tomodati-NM bag-AC lost
"The friend that Taka gave a textbook lost his bag"

The fact in (10) that the complex NP and relative clause do not allow topicalization inside them indicates that it is not the topic marker but the Accusative case marker that is dropped form the object in (9a) and (9b). Notice also that these objects can be either [+ specific] or [- specific] given appropriate discourse as in (11), which observes the specificity condition of Accusative-marked object, not topicalized object, as discussed in section 2:

(11) a. Speaker A: dono-tomodati-ga kaban-o nakusita-no?
which-friend-NM bag-AC lost-Q
'Which friend lost the bag?'
Speaker B: [[kyookasyo-Ø Taka-ga ageta] tomodati-ga] kaban-o nakusita [- specific]
textbook Taka-NM gave tomodati-NM bag-AC lost
"The friend that Taka gave a textbook to lost his bag"
b. Speaker A: Taka-ga uti-no kurasu-no kyookasyo-o aru onnanoko-ni ageta rasii ne
Taka-NM our class-GN textbook-AC some girl-DT gave I heard PT
'I heard that Taka gave the textbook for our class to some girl'
Speaker B: demo, [kyookasyo-Ø Taka-ga ageta ko-ga] kaban-o nakusita rasii yo [+ specific]
but textbook Taka-NM gave girl-NM bag-AC lost I-heard PT
"However, the girl that Taka gave the textbook to lost her bag"

Fukuda's proposal obviously fails to explain the fact that object which does not have a case marker is scrambled without being ungrammatical. Notice also that in these constructions, there is no overt complementizer to govern the scrambled object either. Based on these observations, I claim that Fukuda's claim is invalid as an account of CMD in Japanese.

3.2. ALTERNATIVE ACCOUNT

Alternatively, I would like to propose the following generalization about Japanese case marker drop that correctly explains the distribution of CMD:

(12) Alternative account for case marker drop:
Japanese Accusative *o* is an inherent Case (e.g. Fukui & Takano, 1998), and thus its Case feature is recoverable at LF when the Accusative-marked NP is identified as an internal argument of V. On the other hand, Nominative *ga* is a structural Case and hence cannot be recovered at LF when dropped.

There are two empirical facts that support the generalization (12). Firstly, this generalization predicts that Accusative *o*, being an inherent Case chosen by the lexical property of the V, can be dropped no matter where it moves[10] since the Case assignment is carried out at the base position where there is a trace of a moved constituent. This prediction is indeed supported by examples in (9), where the object without *o* is scrambled and yet it is still licensed as grammatical. This fact casts doubt on the earlier observation in (1c) that scrambling of object without *o* is prohibited. Not surprisingly, however, we already observed in section 3.1 that empirical data from Yoo et al. (2001) showed that this construction is considered acceptable to some extent by native speakers. As already discussed in section 3.1 I suspect that the earlier observation about ungrammaticality of (1c) stems from the fact that this sentence is seen in a written context, where CMD by definition is prohibited.

Secondly, this generalization accurately predicts that *ga* is never dropped, as in (13) below:

(13) a. *[[Taka-Ø pasokon-o katta] jijitu-o] John-wa sira-nakatta (Complex NP)
Taka computer-AC bought fact-AC John-TP knew-NEG
"John didn't know the fact that Taka bought a computer."
b. *[[Taka-Ø kyookasyo-o ageta] tomodati-ga] kaban-o nakusita (Relative clause)
Taka textbook-AC gave tomodati-NM bag-AC lost
"The friend that Taka gave a textbook lost his bag"

Arguably, however, Fukuda observes that *ga* can be dropped in (14) as it is head-governed by sentence-final particle *yo* in C:

(14) John-Ø sono hon-o yonda-yo
John that book-AC read-PT
"John read the book.'

Fukuda's analysis entails that the NP 'John' is in [Spec, IP] where the Nominative Case is assigned by I. However, Fukuda did not consider the possibility that the dropped constituent might be topic marker instead of Nominative case marker, as topic marker of topicalized constituents can always be dropped as already shown in (1e). In fact, if a dropped element is a topic marker, it follows that a topicalized subject is obligatorily [+ specific] in its reference, and a [- specific] subject without a case marker should be ungrammatical, regardless of the presence of final-particle *yo*. This means that we can test the identity of the dropped element in (14) by examining the specificity of a subject NP when a similar structure is embedded in a discourse context that forces [- specific] interpretation. This is illustrated in (15) below:

(15) a. Speaker A: donna hito-ga hon-o katta-no?
what person-NM book-AC bought-Q
'What kind of person bought the book?'
Speaker B: *arugakusei-Ø hon-o katta-yo [- specific]
some student book-AC bought-PT
"Some student bought the book."

b. Speaker A: ano gakusei-wa nani-o katta-no?
that student-TP what-AC bought-Q
'What did the student buy?'
Speaker B: ano gakusei-Ø hon-o katta-yo [+ specific]
that student book-AC bought-PT
"Yes, that student bought the book."

First, notice that Speaker B's utterance in both (15a) and (15b) has the sentence-final particle *yo*, which was the sufficient condition to license *ga*-drop according to Fukuda. However, (15a) is ungrammatical even though there is such a particle, hence Fukuda's analysis is untenable. Evidently, the contrast in grammaticality of (15a) and (15b) rests on specificity of subject without case marker: Discourse situation in (15a) forces [- specific] interpretation to '*gakusei*' in Speaker B's utterance since it has a generic reference (meaning 'some student'), whereas '*gakusei*' in Speaker B's utterance in (15b) specifically refers to a particular '*gakusei*' already mentioned in advance by Speaker A. In other words, ungrammaticality results when a sentential subject without a case marker has [- specific] reference. Then, it follows that the missing element has to be a topic marker, since topicalized NP has to be [+ specific] in its reference (see the discussion in section 1) and [- specific] reference is not allowed for topicalized constituents. This falsifies Fukuda's claim that *ga* can be dropped, and supports the claim made in generalization (12) that *ga* can never be dropped.

One possible problem with generalization (12) is that an object with Accusative (inherent) Case appears with Nominative Case when passivized, which is not the typical behavior of NP with inherent Case (e.g. Dative marked object in German remains as Dative even when the object is raised by passivization). I do not have a definitive answer to this problem, although it seems possible to claim that this observed phenomenon results from the PF requirement for *ga* and *o*, as defined in (16):

(16) Case marker *ga* and *o* must be replaced by particles that are subsequently assigned at PF.

The best example of this effect is seen in the fact that *ga* and *o* never co-appear with the topic marker *wa* when topicalized, although other post-NP elements such as postpositions can be followed by a topic marker without being deleted. This clearly contrasts with Korean which allows the occurrence of two successive case particles ('case stacking'; Yoon, 1996). Therefore, it seems likely that these surface morphological requirements result from language specific PF conditions.

4.0. CONCLUSIONS

In this paper, I have claimed that (a) Japanese case marker does not determine specificity of nouns, (b) *o* is an inherent Case marker and therefore can be dropped no matter where the object moves, and (c) *ga* is a structural Case which cannot be recovered at LF when dropped. The proposed account is perfectly compatible with empirical data discussed in section 3.1, although previous accounts that rested on the ECP could not predict nor explain the outcomes of the observed data. It is important to note here that Fukui & Takano (1998) note that the assumption that Japanese Accusative case marker is an inherent Case has certain theoretical advantages for their theory of Case checking in Japanese. In this way, I believe that the study of CMD can contribute to the development syntactic theories in a much broader sense, although we have to await future research to determine whether the proposed account is truly on the right track.

NOTES

* I am deeply indebted to Tomomi Sasaki and Taka Okazaki for "their" native speaker intuition, and special thanks are due to Yuko Otsuka and Bonnie D. Schwartz who kindly offered helpful comments and discussions. All the remaining mistakes are mine.

1. Following the standard usage of this term in syntax literature, I use capitalized 'Case' to refer to abstract case.
2. Examples without citation are my own.

3. Abbreviations used in this paper are as follows: NM=Nominative Marker, AC=Accusative Marker, DT=Dative Marker, GN=Genitive Marker, TP=Topic Marker, PT=Particle, NEG=Negation, Q=Question particle, COMP=Complementizer.
4. Throughout this paper, I use 'Ø' to mean dropped case marker or topic marker.
5. I tentatively assume that topicalization in Japanese involves movement of a constituent from its base position to the Topic Phrase, although this is not to exclude the possibility that the topicalized constituent could be base-generated in Topic Phrase. However, this point is irrelevant to the focus of this paper, and neither of the analyses are incompatible with the claims made in this paper.
6. Although what Yoo et al. (2001) were interested in was how L2 learners behave toward CMD, they needed to establish that their prediction is born out in L1 control group. In fact, as discussed in the text, the data indicate that their analysis may not be accurate.
7. Three native speakers of Japanese who were informally consulted confirmed accuracy of the judgment for all the sentences given in the text.
8. The functional category K heads a maximal projection KP, and selects NP as its complement
9. See discussions in Chomsky (1995) for empirical advantage of such assumptions.
10. In fact, the dative case marker, which represents another type of inherent Case, can be dropped:

(i) a. Ken-ga basu-ni notta
Ken-Nom bus-Dat rode
"Ken rode a bus"

b. Ken-ga basu-Ø notta
Ken-Nom bus rode
"Ken rode a bus"

c. [[basu-Ø Ken-ga notta] jijitu-o] Mary-wa siranakatta
bus Ken-Nom rode fact-Acc Mary-Top knew-Neg-
"Mary didn't know the fact that Ken rode a bus"

However, the status of Dative case marker is still not clearly distinguished from postposition, and thus I do not investigate this issue further (see Sadakane & Koizumi (1995) for an attempt to identify what constitutes Dative case marker.)

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NATURAL CONVERSATIONS AS LANGUAGE MODELS: INQUIRING ABOUT RENTALS

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1.0. INTRODUCTION

Dealing with rentals engages speakers in certain tasks that require communication or negotiation with real estate agents: asking for information on a particular unit; making an appointment with an agent; making a contract; and addressing problems to the agent. Such tasks seem to be important for learners to be able to perform, in particular, when they move into English-speaking countries and rent a place to live. The tasks on rentals require learners' understandings of certain discourse patterns or interactional norms in the target language culture. Therefore, it is important for ESL instructors to assess certain speech activities that take place in the context of rentals since few ESL textbooks deal with such tasks that engage learners in such a specific type of communication with real estate agents.

According to Fontejen and Saito (2001), a need for "real world" materials does exist. Their task-based materials development project, where a needs analysis was conducted to identify communication tasks where ESL students need to learn the language necessary in the real world, has driven the researcher to seek real interaction in the context of rentals. The results of the needs analysis revealed that ESL Japanese students may have pragmatic difficulty communicating with real estate agents regarding the degree of politeness. However, due to time constrains, target discourse analysis was not conducted, which is of importance as a second stage of needs analysis.

This present study reports what speech activities on rentals are recurrent in thirty actual auditotaped telephone conversations at a real estate agency. The micro-analyzed conversation and ethnography of speaking focuses on the following two aspects of one speech event: (1) certain features of native-native English speaking discourses that are salient in one particular speech event – that is, inquiring about rentals on the telephone; and (2) norms of interaction between real estate agents and prospective or current tenants. The discourse features and norms of interaction found in such a specific context, may have important pedagogical implications for ESL classroom teaching that aims to help learners to handle rentals in the real world.

2.0. BACKGROUND

The acquisition of L2 pragmatics has been a central concern in the literature of the learning and teaching of pragmatics. Previous studies in interlanguage pragmatics have revealed a lack of non-native speaker's pragmatic competence to be able to communicate in certain situation-appropriate ways, even though they have an otherwise good command of a target language (e.g., Bardovi-Harlig 1992; Blum-Kulka 1991; Billmyer 1990; Olshtain & Cohen 1990; Thomas 1983).

In addition to such a finding that is evident from interventional studies, traditional ESL textbooks have been criticized for failing to reflect real language and pragmatically appropriate functions, and of misleading learners (e.g., Bardovi-Harling, Hartford, Mahan-Taylor, Morgan, & Reymonds 1991; Boxer & Pickering 1995; Cathcart 1989; Holmes 1988; Myers Scotton & Bernsten 1988; Williams 1988). The previously-mentioned studies have evaluated the adequacy of ESL textbooks. One of the Williams' (1988) critiques on ESL textbooks that introduce the language for meetings is exemplified with the expression, *in my opinion*, which is not appropriate for expressing one's opinion at a meeting despite being taught in textbooks. It appears, according to Williams, to give an impression of "overtone of *I know what your opinion is, but mine is...*" (p. 52). Bardovi-Harling (2001) argues that ESL textbooks, in general, cannot be "a reliable source of pragmatic input for classroom language learners" (p. 25).

Hence, the need for teaching real language use in pragmatically appropriate ways has been the key issue in second language teaching in order for ESL learners to develop their pragmatic competence. Some researchers (e.g., Bardovi-Harlig et al. 1991; Cathcart 1989; Williams 1988; Wong 2002) have addressed such an issue by indicating some pedagogical implications in teaching pragmatics. Cathcart (1989), for example, advocates for "collection of authentic models of contextualized language" on behalf of curriculum development

(p. 120). She mentioned that such authentic data should be "carefully described in regard to the sociolinguistic variables" since language use differs across topics and between interlocutors of social status (p. 120).

These arguments for teaching real language use are also supported by a number of discourse studies that have compared native speaker discourse in particular speech events with representations of such interaction in textbook dialogues and found the textbook versions sorely deficient. Speech events and actions investigated thus far include openings of telephone conversations (Wong 2002), conversational closings (Bardovi-Harlig et al. 1991), interaction in meetings (William 1988), doctor-patient interaction in pediatricians' offices (Cathcart 1989), asking for directions, and making requests in service encounters (Myers Scotton & Bernsten 1988). Regardless of the fact that these studies have shown a mismatch between native discourse and ESL textbook discourse in such particular events, the focal speech event of this study, inquiring about rentals, has not been described for pedagogic purpose thus far.

If ESL instructors need to collect authentic data for classroom teaching, then how such a need for teaching real language use can be assessed should be considered. One of the solutions for meeting the need is by using a task-based approach, proposing everyday tasks as the basic unit of analysis to approximate a real world use (e.g., Long 1985; Long & Crookes 1992; Robinson 2001). Needs analyses are also of importance in identifying tasks that learners will engage in, and the language needed in the real world (Long 1985; Robinson 2001). Additionally, a target discourse analysis is essential as a second stage in needs analysis.

Target discourse analysis can be pursued in a number of ways, and many recurrent discourse features can be found by collecting naturally on-going conversations. Discourses can be analyzed from a micro-analytic perspective, which leads to the investigating of types of speech acts, or of features of conversations such as repair or overlapping. According to Hutchby & Wooffitt (1998), conversation analysis (CA) is the microanalytical variety of discourse analysis, and is derived from sociology in the work of Sacks. At present, it is often referred to as talk-in-interaction, that is, "the interactional organization of social activities" (p. 14). In CA, words used in talk are not investigated as semantic units, but as products or objects designed and utilized in terms of the activities being negotiated in the talk as requests, proposals, accusations, and complaints.

Another approach to target discourse analysis could be the ethnography of speaking. According to Cameron (2002), the ethnography of speaking examines "the rules of speaking that are operative in particular language-using communities" (p. 55). In order to address the purpose of this type of discourse analysis, "the study of *language in use*" (p. 55), Cameron demonstrates the concept of Hymes' communicative competence emphasizing not linguistic competence focusing on rules of grammar but the rules of speaking.

The interpretations from such an ethnographic perspective can be drawn from the three units of analysis of communicative competence, as Hymes (1972) suggests, *speech situation, speech event*, and *speech act*. The speech situation, as Cameron (2002) mentions, refers to "the social context in which speaking takes place" (p. 55), for example, a family meal. According to Saville-Troike (1998), the speech event involves activities that can occur with "the same general purpose of communication, the same general topic, and the same participants, generally using the same language variety, maintaining the same tone or key, and using the same rules for interaction, in the same setting" (p. 370). For example, in the ESL situation, the classroom can divide into a sequence of recurring events such as opening routines (e.g., *What day is today?*), teacher-directed lesson on a target language form, and a follow-up activity.

The last unit of analysis in communicative competence is the speech acts such as 'greeting', 'apologizing', 'insulting', and 'asking/answering questions', which may be either verbal or non-verbal. For instance, a request can be expressed by several verbal forms (e.g., *May I please have a piece of candy?*) while it can be appealed by raised eyebrows or a questioning look.

With the three units of analysis, Cameron shows Hymes' SPEAKING grid for the analysis of speech events. The model is illustrated by "a mnemonic device that labels each component with one of the letters of the word *speaking*" (p. 56) – *setting, participants, ends, act sequence, key, instrumentalities, norms of interaction,* and *genres*. Cameron argues that it would be helpful to have such a framework to put the researcher's observations in.

The present study utilizes both CA and the ethnography of speaking in order to have the micro-level analysis of interactional patterns and examine a holistic view of the institution, a real estate agency. Due to few representative dialogues on rentals found in ESL textbooks and a lack of exploring such a specific speech event in the previous studies, authentic conversation data in the speech event should be investigated. In addition, the present study is prompted by ESL students' needs of such a specific communication in the real world, which has been identified via a needs analysis in Fontejen and Saito's study (2001). Therefore, the purpose of the study is as follows:

(1) to identify speech activities that are salient in the context of rentals where native speakers of English are interacting; and
(2) to discover norms of interaction in such a context.

3.0. METHODOLOGY

3.1. RESEARCH SITE

Data were collected at a real estate agency in Honolulu, Hawai'i, where two agents are working. The agency was originally where the researcher was renting a place. In order to conduct the present study, the researcher asked for their cooperation and obtained their consent. The office hours were 9am through12:30 pm and 2pm through 4:30pm. One of the agents came in for an early shift, and the other came in and out according to his schedule. The researcher usually came in at a regular time, around 10 am, every day and stayed for approximately two hours to observe how their business is conducted. During the four week period of the study, current tenants sometimes came in to address problems with their units or dropped off checks to make payments for the rent. The telephone constantly rang and the agents interchangeably answered the phone. They talked with the property owners or managers, current and prospective tenants, carpenters, and electricians over the telephone.

3.2. PARTICIPANTS

Two agents participated in the study. Both were native speakers of English, born in Hawai'i. They cooperated with the researcher, and gained consent from prospective tenants and current tenants in order to record telephone or face-to-face conversations with the agents. They were also willing to answer questions the researcher had about rental issues. They explained to the researcher the terms that came up in the telephone or face-to-face conversations or provided supportive information about such conversations.

They had their own roles in their positions. One ran the business: dealing with payments for federal and state taxes, and company and regular bills, and keeping track of the company's booking with an accountant. The other was the owner of the company. He checked telephone calls coming in, provided information about properties, and had more contacts with prospective tenants and current tenants. In fact, both of them interchangeably answered the phone to have conversations with callers.

Other participants were thirty callers (either prospective or current tenants) who asked for information on the advertised properties. The conversation-recording was conducted when consent was given by the participants.

3.3. DATA COLLECTION

The agents kindly agreed to be recorded during the everyday two-hour data collection. For ethnography of speaking, a tape recorder (walkman) with a microphone was placed between their desks. While the recording was conducted, the researcher also took notes for ethnographic information. The recording at the real estate agency lasted over four weeks. The recording of telephone conversations took place when telephone calls came in, but only when the callers agreed to the recording. Another tape recorder, which one of the agents owned, was hooked up to the telephone so that the telephone conversations would be audiotaped with the record button, after consent was given by the callers. In addition to the telephone conversation recording, the researcher conducted informal interviews to elicit the agents responses on, for instance, what some business terms meant, how they talked with callers, and what they did in their positions.

4.0. THE FOCAL SPEECH EVENT: INQUIRING ABOUT RENTALS

Through the data analysis, one speech event –inquiring about rentals over the phone –was identified and analyzed. Thirty telephone conversations, where the agents and callers were discussing a rental unit, were transcribed. Within the telephone conversations, several particular discourse patterns were salient: use of continuers (e.g., *okay, uh-huh*); starters of inquiries (e.g., *uhm, so*); repetition of addresses; repair; appreciation; inquiry about names; and indicators of closings (e.g., *okay?*).

The most remarkable discourse pattern is represented by the use of continuers for the agents and prospective tenants (PTs) to show mutual understandings of what was discussed throughout the conversations. This can be considered as a norm of interaction between them when they elicit information from each other over the telephone. Such continuers are expressed with *okay, all right, uh-huh,* or *mm-hm*. Here are two extracts that show such a typical use of continuers:

(1) [Saito:TC5: 24-30]

	24	A:	Uh: we have a refrigerator: and ra:nge yeah.
→	25	PT:	O:kay=
	26	A:	=Insi:de,=
→	27	PT:	=all right!=
	28	A:	=but you would have to provide your own wash machi:ne
			and dryer. >There is a
	29		hook-up for it<
→	30	PT:	Okay!

(2) [Saito: TC11:1-3]

	1	A:	It's uh one block east of Brooken Avenue
	2	PT:	(..) One block east of Brooken=
→	3	A:	=Mm-hm=

Extract (1) illustrates a telephone interaction where the agent is explaining to a PT what appliances are equipped in the house that the PT is calling on. After the agent describes certain appliances like a refrigerator or stove, which would be necessary for tenants to live in the unit, the PT indicates her understandings of what the agent is explaining by using 'O:kay' (line 25) or 'all right!' (line 27). Another example of a continuer is *mm-hm* (line 3) presented in extract (2), where the agent shows his understanding after another PT confirms the address of the property in which he was interested.

Another salient feature in the use of continuers is that such continuers on the caller's part tend to cause the agent to provide more information on rentals. This could be one of the interaction norms between the interlocutors when the caller needs detailed information on a particular unit, as the following dialogue shows:

(3) [Saito: TC 13:1-15]

	1	A:	OK This one here is currently available
→	2	PT:	Mm-hm
	3	A:	This one is unfurnished yeah meaning
			it doesn't have the appliances (..)
	4	PT:	No refrigerator or
	5	A:	Yes no stove yeah
→	6	PT:	Okay
	7	A:	This one here comes with one parking There's street parking
	8		Uh:: this one here let's see is located at 1048 4th Ave.
			And this is Unit D
	9		this is the last house in the back
→	10	PT:	Okay
	11	A:	coz four houses on the property yeah
→	12	PT:	OK
	13	A:	That's house ( ) So we recommend if you can drive by first
	14		and give us a call if you wanna look inside
	15	PT:	OK=

In excerpt (3), the PT constantly uses continuers such as 'Mm-hm' (line 2), 'Okay' (lines 6 and 10), and 'OK' (line 12). Immediately after such continuers, the agent continues to describe the unit on which the PT calls. This may imply that the use of continuers on the PT's part gives the agent a sign of 'more information is needed'.

The tokens displaying the beginning of questions, starters of inquiries, are another salient discourse pattern found across the telephone conversations. The pattern can be thought of as an interactional norm where the agent is prepared to listen to the PT when he hears the starters of inquiries listed below. In most of the cases, the starters are initiated by PTs, and exemplified by *uhm*, *uh:m*, *okay, and (then)*, or *so*. Such starters imply the beginning of PTs' questions to the agents. The following extracts show use of such starters of questions:

(4) [Saito: TC1:13-18]

	13	A:	Uh::: this house's unfurnished doesn't have a stove and an ice box=
	14	PT:	=Oh: really=
	15	A:	=Yes=
→	16	PT:	=O:kay. Uhm does this include utilities?=
	17	A:	=Ahh yes utility except telepho:ne and cable
→	18	PT:	O:kay uhm nun you know this near bus a bus line?=

In Extract (4), note that the PT uses the starter, 'uhm' (lines 16 and 18) right before she asks the agent the questions about utilities and a bus line nearby the house on which she called. The following two extracts (5) and (6) demonstrate different types of starters before the PTs ask particular questions, using 'O:kay, and then' (line 39) or 'O:kay a:nd' (line 31):

(5) [Saito: TC5: 37-39]

	37	A:	=You can drive by, and take a look at it. If you wanna look inside, just give us a ca:ll
	38		back.
→	39	PT:	O:kay, and then the one in Kalihi?

(6) [Saito: TC 11: 28-31]

	28	A:	=Kakeo
	29	PT:	K-A-K-[E
	30	A:	-[E-O
→	31	PT:	O:kay a:nd you said it's uh:: by Brooken.

Another recurrent discourse pattern is repetition of addresses. It is likely to take place when the agents tell the PTs the address to look at the place that is the central topic in the telephone conversations. This discourse feature is notable in this kind of speech event, that is, inquiring about rentals. When the address is given, callers tend to repeat it, spelling out the address with numbers and the name of area. The following excerpt (7) is a typical pattern of such repetition of the address. The PT makes sure that she gets the right street name where the property is located (line 18):

(7) [Saito: TC7: 16-19]

	16	PT:	And wh- what's the location.
	17	A:	The location is uh 2437 Kakeo Street K-A-K-E-O 2437
→	18	PT:	Is this in uh K-A-K-E-O?
	19	A:	Yeah! That's it.

Repair is also a recurrent discourse pattern that indicates the mutual orientation to the same topic between the agents and PTs. It seems to be the key strategy as a norm of interaction between them in order to make sure they are on the same topic. This tendency is likely to happen when they confirm the address of a particular unit or when the PTs get confused about information provided by the agent. Excerpts (8) and (9) demonstrate such cases:

(8) [Saito: TC5: 108-113]

	108	A:	=And the Kyertle Street one is in Palolo.=
	109	PT:	=Yeah!
	110	A:	OK? So uh so:: the address is 2437 Street. 2437 Kakeo uh spelled K-A-K-E-O.
	111	PT:	K-A-K-I-=
→	112	A:	=E as East=
	113	PT:	=Uh-huh

(9) [Saito:TC7:42-43]

	42	PT:	So: the three bedroom th- two story house is-
→	43	A:	There are three bedroom and two bath and the front house is two bedroom one bath

In extract (8), the agent initiates repair in line 112 ('E as East') since the PT repeats the wrong spelling of the street in line 111 ('K-A-K-I-'). This type of repair is called *other-initiated other-repair*. According to Hutchby and Wooffitt (1998), in such a repair type there is "an explicit correction which is then acknowledged and accepted in the subsequent turn" (p. 63). Apparently, in line 112, the agent makes an explicit correction on the PT's previous utterance.

Extract (9) shows another type of repair, which is called *self-initiated other-repair* where, as Hutchby and Wooffitt argue, the first speaker indicates his/her trouble remembering, for example, someone's name, and it draws on the second speaker's repair. In extract (9), the PT has been given information up to the previous line (line 41), and a massive amount of information about three houses leads her to confusion. Since she shows uncertainty about what the three bedroom house is like (line 42), the agent assists her with the correct information about the house and describes another house for comparison.

Appreciation, another remarkable discourse pattern, is mostly shown at the end of communication. This pattern appears to represent a norm of interaction in order for the callers to show gratitude towards rental information given in the conversations. The callers generally indicate gratitude to the agents for providing adequate information on a particular unit. The following extract demonstrates such an example found in most of the conversations (line 9):

(10) [Saito: TC9: 1-2]

	1	A:	Uh three bedroom house, OK? Yeah?
	2	PT:	Yeah the three bedroom one bath unfurnished $1200? and then there's
	3		another two bedroom two bath, $1350? That's partly furnished?=
	4	A:	=Yes, correct!=
	5	PT:	=Uhm do you accept Section 8 on this unit?=
	6	A:	=O:h No! They are not!
	7	PT:	Not at a:ll?=
	8	A:	=Yea:h, sorry=
→	9	PT:	=O:kay thank you=
	10	A:	=Okay you are welcome=
	11	PT:	=Bye- [bye
	12	A:	[Bye

Another discourse feature towards the end of the conversations is inquiry about names. Both the agents and PTs tend to ask for the other speaker's name at the end of the conversations in order to remember the name for the next time phone call. This pattern is likely to emerge when two speakers have a considerably long conversation. Extract (11) is a representative of such a dialogue pattern from a long dialogue. The interlocutors have discussed several rental units up to line 118, and both of them ask for each other's name for future contact in line 119 ('And your na:me?') and in line124 ('And your name was?'):

(11) [Saito: TC5: 119-126]

→	119	PT:	=A:ll right! And your na:me?=
	120	A:	=Uh this is George, but you can ask for Richard if you wanna look inside.
	121	PT:	Geo:rge, but a:sk for Richard.
	122	A:	Ahehe!
	123	PT:	O:kay.=
→	124	A:	=Okay? And your name was?=
	125	PT:	=My name's Lisa
	126	A:	Lisa Thanks, Lisa!=

The last salient discourse pattern features indicators of closings such as *Okay?* or *Sorry*. The indicators can be used as one of the norms of interaction when the agent has no information to give and wants to close a conversation. The telephone conversation data reveal that the agents are likely to produce the dialogue pattern to imply the end of the conversation when they have no particular information to provide for callers. The following extract represents two indicators for the agent to hint the closing of the conversation (line 70):

(12) [Saito: TC7: 62-72]

	62	PT:	=Do you guys accept Section 8?
	63	A:	O:hhh! I'm sorry No: Not at this homes.
	64	PT:	Oh, not at this one?=
	65	A:	=Yea:h, you should'v asked us first cuz (...) I >don' wanna waste-<=
	66	PT:	=Do you gu:ys uhm have any other ho:mes that accept Section 8?
	67	A:	U:hhh No:! That's the only one we ha:ve right now. A:ctually now rent
	68		everything is rented out
	69	PT:	Oh: OK
→	70	A:	OK? So:rry Okay=
	71	PT:	=Thank you:=
	72	A:	=Bye-bye

In Extract (12), the PT gains all information about the house on which she calls, but towards the end of communication, her intention of looking at the place is declined (line 63) because the agent does not accept Section 8 people at this property who are supported by government assistance for housing. The agent explains to her that he has no more available information for Section 8 (lines 67-68). Then in line 70, he uses such indicators as 'Okay?' and 'Sorry' (line 70) to imply closing the conversation. This kind of pattern is found in the other telephone conversations.

The aforementioned salient discourse patterns are so remarkable across the thirty telephone conversations between the agents and PTs that they can be related to norms of interaction in this particular context – inquiring about rentals.

In addition to such discourse patterns, there are certain topics discussed between the agents and the PTs. These topics include the availability of properties, rental prices, utilities and locations. These tend to become the topics of the conversations and cause the conversations between two interlocutors to develop in various ways. However, such topics are sequenced variably; there is no certain sequence of topics listed between the interlocutors.

Why are such topics variable from one conversation to another? This question had remained until the researcher discovered certain interactional patterns between the agents and the PTs. There are four types of interactional patterns when a flow of the conversation changes. Either the agents or PTs can be in control in the conversation, in other words, become the leading speaker of the interaction, by using the following interactional patterns:

- Pattern 1 – PTs (in control) ask questions, introducing a new topic, and agents answer
- Pattern 2 – Agents (in control) continue to give information (particularly after PTs use continuers) when PTs have no questions to ask
- Pattern 3 – PTs (in control) respond to what agents are describing, and it leads to clarification or repair
- Pattern 4 – Agents (in control) ask PTs questions, and PTs answer

What is noteworthy here as an interesting finding is that the agents and PTs are likely to interchangeably take the initiative of leading their conversations with the use of four different interactional patterns. Take a look at how these interactional patterns can change and be variably sequenced in the next extract:

(13) [Saito: TC5:24-55]

24	A:	Uh: we have a refrigerator: and ra:nge yeah.
25	PT:	O:kay=
26	A:	=Insi:de,=
27	PT:	=all right!=
28	A:	=but you would have to provide your own wash machi:ne and dryer. >There is a
29		hook-up for it<
30	PT:	Okay!
31	A:	And uh:m yeah it's- it's I think $1500 ? plus utilities [yeah.=
32	PT:	[yeah!
33	A:	=You have to pay yeah. No pets or water beds (Guess) are allowed.
34	PT:	↑Oka:y, uh: this is available right now.
35	A:	Yes correct!
36	PT:	O:kay=
37	A:	=You can drive by, and take a look at it. If you wanna look inside, just give us a ca:ll
38		back.
39	PT:	O:kay, and then the one in Kalihi?
40	A:	The one- yeah the one in Kalihi is still available
41	PT:	Uh-huh=
42	A:	=It's a three-bedroom one bath house, (.) .hh that one there has a wash machine
43		hook-up.
44	PT:	Okay.
45	A:	No dry hook-up.
46	PT:	Okay
47	A:	A:nd that one there, uh there have th- no refrigerator or stove.
48	PT:	It doesn't?=
49	A:	=Yeah, it doesn't.
50	PT:	O:kay=
51	A:	=It's unfurnished yeah. On that sense.
52	PT:	((sneezed))
53	A:	A:nd then that one th:ere that one there is for $1300,=
54	PT:	Uh-huh=
55	A:	= a:nd utilities are included in the rent.

In extract (13), both the agent and the PT interchangeably take over the conversation by changing different interactional patterns. Every time they take turns to lead the conversation, note that such turn-taking alters the sequence of the topics discussed between the two speakers.

From lines 24 - 33, the agent is in control of the conversation. The interactional pattern used here is Pattern 2 (P2). He continues to give information about the appliances equipped in the house since the PT asks no questions and just listens to him with the use of certain continuers (lines 25, 27, 30, and 32). Then in line 34, Pattern 1 (P1) takes place, where a new topic is initiated by the PT's question on the availability of the property. The PT leads the conversation until line 36 'O:kay'. However, the continuer leads to the agent's taking over of the conversation in line 37. This is where P2 comes in. The PT shows the starter of her inquiry, 'O:kay, and then' in line 39. It leads to the PT's question of 'the one is Kalihi?', which introduces a new topic (another house in a different location) again. This is also an example of P1 (line 39).

P1 continues until line 41, where the PT shows her understanding of what has been discussed with the agent by using the continuer, 'Uh-huh'. She takes over in line 39, which indicates P1, but now in line 42 the agent takes the initiative of the conversation since the PT utters 'Uh-huh' in line 41. This is where PT 2 starts, and it renders the agent to initiate another description of the house. P2 lasts until line 47 where the agent is still in control over the topic (appliances equipped in the house), explaining what the house comes with because the PT keeps using some continuers and shows her understandings of what information has been provided. Then Pattern 3 (P3) starts in line 48 where the PT asks for clarification on whether the house is truly unfurnished. Her utterance "It doesn't?" with a rising intonation (line 48) makes her take over the conversation, and it leads the agent to respond to her question. Then the PT's continuer, 'O:kay' (line 50) draws on another interactional pattern, P2 initiated in line 51. After line 51, the agent starts taking over by describing the house and the rental price as the PT has no questions to ask and uses continuers to indicate her understandings.

What seems to be found as one of the interactional norms here is that the PT's use of continuers usually leads the agents to provide more information about the particular unit. This tendency happens especially right before P2 starts, where the PTs utilize continuers.

Pattern 4 (P4) hardly occurs among the telephone conversations. However, in another excerpt, (14), the agent utilizes P4 in line 36 to elicit the current tenant's response on what kind of unit she is looking for:

(14) [Saito: TC3: 30-35]

	30	A:	=Okay, Oka[y
	31	T:	[I'll get planned and mea:nwhile uhm will you ple:ase let me know if
	32		anything comes up (.) you know anything like a little house in Kaimuki:, apa:rtment
	33		that's chea:p you know [anything!]Really!=
	34	A:	[O:kay okay]
	35	T:	=W- we're looking for[uh-
→	36	A:	[How many bedrooms preferably.
	37	T:	Um the ideal thing would be two

At the beginning of the conversation, the current tenant starts with the problem that she was not able to find another place to move out. Then she tells the agent verbally to turn in another notice letter the following month to move out. In line 31, she initiates a request so that the agent could give information on a good place for her to move in. She totally changes the topic (giving a notice to move out) previously discussed by using P1 here. She is in control until line 35. Though she does not complete her utterance in line 35, the agent takes over the conversation by asking the question, 'How many bedrooms preferably.' (line 36). This represents a typical example of Pattern 4 (P4).

The four interactional patterns do not always take place interchangeably. The following excerpt shows a case where the agent keeps leading the conversation:

(15) [Saito:TC2: 1-20]

1	A:	OK↑ This one here is uh currently available. Uh which did you newspaper
2		did you: take a look at. Wh- where did you find this ad.
3	PT:	Uh:m I: ( ) wasn't th uh (.) Th[e:
4	A:	[Star Bullentin.

5	PT:	Yeah, the star ( )
6	A:	Okay Okay, a:nd uh was this an old one↑ or was it a fairly new one=
7	PT:	Uh:
8	A:	=cos I didn't know the agent was still running this ad.
9	PT:	O:h it was Friday newspaper=
10	A:	=Oh Friday. Okay Okay. Okay, yea:h this one here is currently available.
11		Uh this is unfurnished yeah. That mea:ns it doesn't have the: refrigerator
12		or stove yeah.
13	PT:	Okay=
14	A:	=That's just the front house You're looking at under the: unfurnished section
15	PT:	Oh:, yeah.
16	A:	And so: this one here is for $1200, an:da: this one here: comes with wa:ter and
17		electricity And there's also a second house on the property which is on the back side
18		yeah. That's separate. That's a three bedroom two ↑bath and that one is for $1250.
19		but that one has the: appliances, th- the: uh: refrigerator and stove
20	PT:	Okay

In Extract (15), the agent starts with a couple of questions, and the PT answers the agent. This pattern, called P4, lasts until line 13 where the PT uses a continuer to respond to what the agent is describing in the previous line. Moreover, even after line 14, the agent describes the rental units by using P2 and still continues to be in control of the conversation. In the originally transcribed data, the whole conversation is almost totally occupied with the agent's leading the sequence of the conversation. This is a relatively rare case where the PT is not active throughout the conversation. However, most of the conversations indicate the interchangeable power shift of each other's communication.

With respect to the degree of politeness, what is important to note amongst the thirty telephone conversations is that there is a difference between *requests for information* and *requests for action*. Most of the time, the context where people are negotiating on rentals requires *requests for information*. People usually call up a real estate agency to ask for information about a particular unit before they look at it. It usually does not involve an action that requires the agent to work on something that is an imposition; it is rather a part of the business for the agent to provide such information. This type of request is called *information-eliciting requests*. In that case, PTs do not use politeness to request rental information. On the other hand, when their request involves the agent's action, politeness is marked in their utterances. This type of request is called *polite requests for action*.

There are several types of information-eliciting requests used when information is requested by PTs: yes/no questions; wh- questions; and ellipsis. The following excerpt illustrates such information-eliciting requests:

(16) [Saito: TC 22: 5-27]

	5	A:	This is unfurnished ya It doesn't have appliances
	6	PT:	Oh: noth- Oh:
→	7		no refrigerator o[r
	8	A:	[Yah that's what they mean when you say unfurnished ya
	9		Uh when you say partly furnished then you have a stove or refrigerator in there
→	10	PT:	Doesn't it have a sink at all?
	11	A:	Oh ya ya ya
	12	PT:	( )
	13	A:	Oh ya ya ya You should have normally

			refrigerator and stove (Guess)
→	14	PT:	Okay Where's exactly located?
	15	A:	It's located at 1104 4th Avenue and you wanna look inside
	16		the agent will be showing it in about fifteen minutes
	17		I don't know if you can make it yah but you can drive by anyway
	18		There's one parking open parking and
			the rest is street parking if you want ya
→	19	PT:	Does it generally have any street parking?
	20	A:	Uh::: whatever ( ) tight ( ) school
	21	PT:	Okay
	22	A:	Yeah you can drive by and you can take a look at the location
	23	PT:	What if I uhm I'm interested after I dive by and how can I-
	24	A:	Give us a call back and we can make an appointment (.) yah=
	25	PT:	=Okay=
	26	A:	=Okay Thanks Bye=
	27	PT:	=Bye

In excerpt (16), the PT requests information on a particular rental unit by using yes/no questions (lines 10 and 19), a wh- question (line 14) and ellipsis (line 7). These types of requests can be used to elicit particular information such as appliances in the unit, the location of the address, or anything that comes with the unit like parking. Within these utterances, no politeness is marked since the PT is just eliciting information from the agent.

On the other hand, the use of politeness in prospective and current tenants' utterances comes in when their requests usually trigger *requests for action*. There are several cases where such *polite requests for action* are utilized on the caller's part. The following case shows the current tenant's request for action where the agent actually needs to reply to a little imposing request of hers which is more than just giving the information that he possesses:

(17) [Saito: TC3: 30-38]

	30	A:	=Okay, Oka[y
→	31	T:	[I'll get planned and mea:nwhile uhm will
			you ple:ase let me know if
	32		anything comes up (.) you know anything like a little
			house in Kaimuki:, apa:rtment
	33		that's chea:p you know [anything!] Really!=
	34	A:	[O:kay okay]
	35	T:	=W- we're looking for[uh-
	34	A:	[How many bedrooms preferably.
	35	T:	Um the ideal thing would be two
	36	A:	uh two bedroom.
	37	T:	That would be su:per good but um see: everything in
			my life is like in a transition=
	38	A:	=O:kay=

In extract (17), from lines 31 - 33, the tenant makes a conventionally indirect request where she requests that the agent give another type of information about other openings. She uses a polite form in a conditional form in line 31; 'will you please let me know if anything comes up..?'. In the following extract, she also asks the agent to call her sometime in the near future, utilizing a polite form featuring 'if you could ...' (line 42):

(18) [Saito: TC3: 40-44]

	40	A:	=OK OK hh[h! ( ) huh
	41	T:	[hhh! So anything that you think
			would be goo:d,
→	42		even a three bedroom you know if you could ca:ll me
			and then at that time I should
	43		know mo:re.
	44	A:	O:kay o:kay

These kinds of interaction in excerpts (17) and (18) represent *requests for action* where the agent is actually required to take action to respond to the caller's request, and where the caller needs to use politeness. The following example indicates another conventionally indirect request. Since the request requires the agent's action of showing the place the following day, politeness is marked in the PT's utterance (line 53):

(19) [Saito TC7:46-47]

	46	PT:	So that's one bedroom one bath downstairs.
	47	A:	Yes and two bedroom one bath is upstairs
	48	PT:	Oh::
	49	A:	That's the wa:y the set up is, but there's oh: I guess th- the owner's home an:d uh:
	50		I guess back the:n, when they did the house they did this- they put- designed
	51		with stairs inside the house so you don't have to step outside yeah. to go: to the
	52		bottom It's like uh going down belo:w like a like a basement type yeah. Half base.
→	53	PT:	when whe- can we look at it uhm tomorrow?

In extract (19), the PT gains a lot of information about both houses on the same property, and is greatly interested in them. Since the agent's action is also required here (line 53), the PT uses a polite form, 'can we..?', to look at the place with the agent.

As Excerpts (16)-(19) demonstrate, the use of politeness is likely to be limited to the cases where callers' requests require the agents to do particular work especially when it is their first time to converse with the agents. So the use of politeness is definitely an important strategy when the agent's action is required. However, it seems no politeness is necessarily shown when a request for information-eliciting takes place according to the telephone conversation data. This is also an important finding related to norms of interaction in the speech event.

5.0. PEDAGOGICAL IMPLICATIONS

As a whole, the data analysis has uncovered the following implications for ESL teaching; it is essential to teach (1) several discourse features (e.g., repair, repetition of addresses, use of continuers) that appear in the telephone conversations, (2) certain topics that occur in this kind of speech event such as the location of the place, the availability of the property, and appliances with which the rental place is equipped, (3) four interactional patterns that render the conversation topic change, and (4) norms of interaction between agents and callers.

Particularly, norms of interaction are important to note in order for students to interact with real estate agents:

- The use of continuers shows the speaker's understandings of what agents are explaining.
- The use of continuers leads agents to provide more information.
- Repair can be used to make sure that both of the interlocutors are oriented to the same or relevant topic.
- Questions can be initiated by such discourse patterns as 'uh:/uhm', 'Okay, and (then)', or 'So'.
- Closings can be informed by such utterances as 'Okay?' with rising intonation or 'Sorry'.
- Appreciation for agents should be shown at the end of communication.
- No polite forms are used to elicit particular information such as the availability of the place or of appliances.
- The use of politeness is necessary when it comes to asking agents to do something, particularly when it is the first time to converse with them.

In addition to the use of several discourse patterns examined throughout telephone conversation data, topics discussed in the speech event, and interactional patterns that change along with the topics, such interactional norms should be taught in an ESL classroom. Learning the norms of interaction will allow ESL

students to communicate with agents in pragmatically appropriate ways.

6.0. CONCLUSION

Through the target discourse analysis conducted in the present study, there are several findings that are salient across the telephone conversations among the agents and the prospective or current tenants: (1) there are several particular discourse patterns in the context of dealing with rentals; (2) certain topics are frequently discussed; (3) there are four interactional patterns utilized between the agents and callers; (4) the degree of politeness differs, depending on types of requests; and (5) several norms of interaction exist between the two speakers. The findings have pedagogical implications for a second language classroom since they are based on authentic interactions in the specific context of inquiring about rentals. It would be useful to incorporate such findings into instruction when teaching L2 pragmatics. Furthermore, it would be beneficial for students to learn particular discourse patterns or norms of interaction found in the present study, which is hardly dealt with in ESL textbooks although the tasks required in the context are necessary for learners to communicate in the real world. The researcher wishes to set up such instruction that provides students with well-designed tasks, based on the authentic data analyzed in the present study, for ESL teaching.

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CROSSING THE BORDERS OF FUNCTIONAL AND FORMAL LINGUISTICS: AN OPTIMALITY THEORETIC ACCOUNT OF GERMAN TOPIC DROP*

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1.0. INTRODUCTION

In contrast to pro-drop languages like Spanish or Italian, in which a pronominal subject argument of a verb may be, and usually is, dropped, standard German requires all verbal arguments to be overtly expressed. However, in informal spoken contexts, it is not unusual for speakers to not adhere to this requirement. What can be observed in these contexts is that the first constituent of a sentence is frequently omitted. This constituent does not necessarily have to be the subject of the sentence. Thus, if you imagine yourself in a doubles tennis match, and you want to indicate to your partner that you want to hit the ball, you may easily say either of the following sentences:

(1) Hab' ihn!
have it
'I have it!'

(2) Hab' ich!
have I
'I have it!'

Since the initial constituent of a sentence is often said to be its topic (i.e., what the sentence is about, Lambrecht 1994), this phenomenon has been referred to as topic drop, and German has on these grounds been grouped together with other topic drop languages such as Chinese and Japanese (e.g., by Huang, 1984). However, topic drop in German differs from that in Chinese or Japanese in that it is much more restricted. It can only occur in sentence-initial position, and only in main clauses, and not all kinds of topics can be dropped equally well. Thus, it appears that for subjects, first and second persons as well as third persons may be dropped whereas object drop is limited to the third person (Cardinaletti, 1990, cited in Rizzi, 1994).

This subject-object asymmetry found for German topic drop is the focus of the present paper. In particular, I will examine whether the notion of harmonic alignment, one of the explanatory concepts used within the framework of optimality theory (OT), can help explain the observed differences. Harmonic alignment offers a principled way to capture subject-object asymmetries that have often been subsumed under the term 'markedness reversal' and thus seems to be a promising approach to deal with the above mentioned differences in the droppability of subjects versus objects.

The paper is structured in the following way. I will first describe the relevant facts about German word order and the so-called topicalization process and then illustrate in what way topic drop is restricted in German (§ 2). Next, I will outline one account (Rizzi 1994) that has been advocated within the generative framework to capture the differential droppability of topics (§ 3). I will then introduce the basic assumptions underlying OT as well as the notion of harmonic alignment and show how the topic drop phenomenon in German can be accounted for within an optimality theoretic approach (§ 4). Finally, I will argue in § 5 that the OT account, in contrast to Rizzi's (1994) proposal, makes interesting typological predictions about the distribution of dropped topics in that it limits the variation in what kinds of topics one would expect to be droppable cross-linguistically.

2.0. GERMAN WORD ORDER

The aim of this paper is to extend the explanatory scope of harmonic alignment, used within the framework of OT, to the subject-object asymmetry observed for topic drop in German. This section will deal with the necessary background, summarizing the relevant facts about German word order, i.e., the phenomenon of topicalization and the restrictions governing the droppability of topics.

2.1. TOPICALIZATION IN GERMAN.

Even though the most frequent word order found in German main clauses is one in which the subject is followed by the finite verb, which, in turn, is followed by the object (i.e., S V_f O or S Aux O V_{nf}), German

exhibits some freedom with respect to the ordering of constituents. Thus, the English sentence *'I gave a book to a boy yesterday'* can be expressed by all of the following variants (among others):

(3)	Ich	gab	einem Jungen	gestern	ein Buch.
	I	gave	a boy	yesterday	a book

(4)	Gestern	gab	ich	einem Jungen	ein Buch.
	yesterday	gave	I	a boy	a book

(5)	Einem Jungen	gab	ich	gestern	ein Buch.
	a boy	gave	I	yesterday	a book

(6)	Ein Buch	gab	ich	gestern	einem Jungen.
	a book	gave	I	yesterday	a boy

Two things are noteworthy here. First of all, the finite verb invariably occurs in the second constituent position. This phenomenon is generally true for German declarative main clauses and is often referred to as verb second (V2). Secondly, it is not only the subject that can occupy the pre-verbal, sentence-initial position, but also the accusative object, the dative object, or an adverbial phrase.

Given such word order freedom, the question arises whether any of the possible orders is in some sense more basic or unmarked compared to the others. Abraham (1986, p. 20) defines as unmarked those orders in which any element can be stressed, thereby being interpreted as new information. For a ditransitive sentence, such as the above examples, this condition is met only for a subject – verb – accusative object – dative object order according to Choi (1999, p. 28). Thus, all of the following stress patterns are acceptable (bold face indicating stress):

(7)	**Ich**	gab	einem Jungen	gestern	ein Buch.
	I	gave	a boy	yesterday	a book

(8)	Ich	gab	**einem Jungen**	gestern	ein Buch.
	I	gave	a boy	yesterday	a book

(9)	Ich	gab	einem Jungen	**gestern**	ein Buch.
	I	gave	a boy	yesterday	a book

(10)	Ich	gab	einem Jungen	gestern	**ein Buch.**
	I	gave	a boy	yesterday	a book

This means that the unmarked word order is contextually neutral, i.e., it can occur in any discourse context (Choi, 1999, p. 29).

One systematic deviation from this unmarked word order is the so-called 'topicalization' construction. As pointed out earlier, not only can subjects occur in the first position of a German main clause, but adverbs, and dative or accusative objects can occur there as well. Fronting a constituent other than the subject is known as topicalization, suggesting that this constituent receives the topic-status by virtue of its initial position. The reason for such topic-first ordering might lie in some general principle of information packaging. The most active referent at the moment of utterance, i.e., a referent that has already been established in the previous discourse, is mentioned first and serves as a "hitching post for new knowledge" or information (Chafe, 1976, p. 44). This strategy results in sentences where the initial constituent is a continued topic. This does not mean, though, that all topics occur in sentence-initial position. This position can also be used for focusing constituents, in which case a continued topic may well occur in sentence-internal position. However, topic drop in German is limited to sentence-initial continued topics. The exact restriction on German topic drop will be the focus of the next sub-section.

2.2. RESTRICTIONS ON TOPIC DROP.

A key factor that has been claimed to be a prerequisite for the droppability of constituents is their recoverability from the context, either by grammatical means of identification, such as verbal agreement, or from the discourse (Huang, 1984). In German, subjects as well as objects can be dropped as illustrated in (11) and (12) respectively:

Was hast du Samstag Abend gemacht?
'What did you do Saturday evening?'

(11) ∅ Bin zu Hause geblieben.
Ich bin zu Hause geblieben.
I am at home stayed
'I stayed home.'

Wo ist denn dein Freund?
'Where is your boyfriend?'

(12) ∅ Hab' ich bei meinen Eltern gelassen.
Den hab' ich bei meinen Eltern gelassen.
him have I with my parents left
'I left him with my parents.'

Since German allows both subject and object drop despite its lack of object-verb agreement, the mechanism for recoverability can, at the most, be partially based on verb morphology. Thus one might suspect that recoverability is pragmatically achieved in that the missing topic needs to be identifiable through the discourse context. This would lead one to expect that it should be possible to drop all continued topics. This, however, is not true. It appears that subject drop is much less restricted than object drop. For subjects of all persons and numbers, a context in which the subject could be omitted is easily conceivable:

First person singular and plural:
Was hast du/habt ihr gestern gemacht?
'What did you (sg)/you (pl) do yesterday?'

(13) ∅ Bin zu Hause geblieben.
(I) am at home stayed
'I stayed at home.

(14) ∅ Sind zu Hause geblieben.
(We) are at home stayed
'We stayed at home'.

Second person singular and plural:
Ich geb' am Samstag eine Party.
'I'm giving a party on Saturday.'

(15) ∅ Kannst gerne auch vorbeikommen.
(you-SG) can please also come by
'You are welcome to come by, too.'

(16) ∅ Könnt gerne auch vorbeikommen.
(you-PL) can please also come by
'You are welcome to come by, too.'

Third person singular and plural:
Wie war das Essen/die Spaghetti?
'How was the food/were the spaghetti?'

(17) ∅ War echt gut.
(it) was really good
'It was really good.'

(18) ∅ Waren echt gut.
(they) were really good
'They were really good.'

In the case of objects, dropping is much more restricted. As has been observed by Cardinaletti (1990, cited in Rizzi, 1994), only third person objects can be dropped, but not first or second person objects. This is illustrated by the following sentences:

First person singular and plural:
Was ist denn mit dir/mit euch los?
'What's the matter with you (sg)/you (pl)?'

(19) *∅ Hat ein Auto angefahren.
Mich hat ein Auto angefahren.
me has a car hit
'A car hit me.'

(20) *∅ Hat ein Auto angefahren.
Uns hat ein Auto angefahren.
us has a car hit
'A car hit us.'

Second person singular and plural:
Wie komme ich/kommen wir nach Domburg?
'How am I/how are we going to get to Domburg?'

(21) *∅ Nimmt der Jens mit.
Dich nimmt der Jens mit.
You-SG takes Jens along
'Jens will take you along'.

(22) *∅ Nimmt der Jens mit.
Euch nimmt der Jens mit.
You-PL takes Jens along
'Jens will take you along.'

Third person singular and plural:
Wo ist denn dein Freund/sind denn deine Kinder?
'Where is your friend/where are your children?'

(23) ∅ Hab' ich bei meinen Eltern gelassen.
Den hab' ich bei meinen Eltern gelassen.
him have I with my parents left
'I left him with my parents.'

(24) Ø Hab' ich bei meinen Eltern gelassen.
Die hab' ich bei meinen Eltern gelassen.
them have I with my parents left
'I left them with my parents.'

In all of the above examples, the element that was (attempted to be) dropped is a continued topic. Its referent was activated through the question. Fronting this topic to sentence-initial position is possible in all cases. Dropping it, however, seems to be impossible if the topic is a first or second person object. If, as pointed out above, droppability of a constituent is determined by its recoverability, this demonstrates that being a continued topic is a necessary but not sufficient criterion for such recoverability. The question that remains to be answered is what accounts for the differential recoverability of the various topic kinds. One proposal to account for this asymmetry has been advanced within the generative framework. This proposal will be dealt with in the next section.

3.0. A GENERATIVE APPROACH TO GERMAN TOPIC DROP

Within the generative framework the subject-object asymmetry found for German topic drop was addressed by Rizzi (1994). In contrast to the *pro-drop* phenomenon, for which dropping is restricted to subjects and is grammatically licensed by agreement inflection on the verb, the empty element in German topic drop, according to Rizzi, is not analyzed as *pro* but as a null constant (nc). Both *pro* and null constants require an antecedent from which they receive a fixed referential value but are not anaphors (in the technical sense in which the term is used within generative grammar, i.e. being subject to Principle A), so they share the properties of being <–anaphor> and <–variable>. They differ in that *pro* substitutes for a pronoun and is <+pronominal> whereas a null constant is <–pronominal>, behaving like an R-expression.

According to Rizzi (p. 162), null elements classified in the above feature system can only occur in A-positions, i.e. positions to which a theta role can be assigned. In addition, they are subject to the Empty Category Principle (ECP). For <–pronominal> null elements, the ECP requires that the empty category be chain-connected to an antecedent, if possible (p. 162). This means, under Rizzi's account, that null elements occurring in the root of a sentence do not need to be chain-connected to their antecedent since there is no c-commanding position that could possibly govern them, and these elements can get their referential value directly from discourse. If, however, the null element occurs deeper in the tree structure, it needs to be chain-connected to an antecedent. In the case of null constants, it is an operator (OP) that serves as antecedent. Such operators occupy specifier positions and serve to link an empty category to its referent, which is the discourse topic in the case of the null constant for German topic drop. Thus the following structures characterize topic drop in German:[1]

Subject drop:

(25) Topic: I [$_{IP}$ nc fand$_1$ [$_{VP}$ den Film gut t_1]
found the film good

Object drop:

(26) Topic: Film [$_{CP}$ OP fand$_1$ [$_{IP}$ ich t_1' [$_{VP}$ nc gut t_1]

As can be seen from these examples, it is only in the case of object drop that an operator is used at all. And since these operators are intrinsically limited to third person (p. 161), the subject-object asymmetry for German topic drop follows. Whereas the null constant can receive its referential value from discourse directly if it occupies the subject position, and is thus not limited to third person topics, in the object case an operator is needed to link the null constant to the discourse topic, and since this operator is restricted to third persons, so is the null constant.

Since Rizzi's account seems specifically to target the subject-object asymmetry found for German topic drop, it is quite difficult to derive typological predictions. Languages with unrestricted object drop clearly

require an analysis different from the one given for German object drop. And it is not clear what predictions should follow for subject drop and whether or not an operator is universally excluded in this case.

In addition to this, subject and object drop, under Rizzi's analysis, are dissociated and do not follow the same mechanism, a fact that Rizzi points out to be an advantage as it enables linguists to unify German topic drop with subject drop in early child language (p. 158). In contrast to this, the optimality theoretic account proposed in this paper offers a unified approach to German topic drop that nevertheless accounts for differential recoverability of subjects and objects by using the concept of harmonic alignment. The OT account will be the focus of the next section.

4.0. AN OPTIMALITY THEORETIC ACCOUNT OF GERMAN TOPIC DROP

In order to understand the formalism of, as well as the motivation for, an optimality theoretic account of topic drop in German, it seems necessary to provide some background about OT and its notion of harmonic alignment. Thus, this section is divided into three parts; the first part will deal with the basic architecture of OT which will be followed by a subsection on harmonic alignment. Both of these will then be applied to German topic drop in the last subsection.

4.1. THE BASIC ARCHITECTURE OF OT.

Optimality theory differs from all other formal syntactic theories in that grammaticality is established comparatively. Instead of determining whether the internal structure of an individual representation (such as a sentence) conforms to the rules or constraints proposed for a certain grammar, grammaticality of such a representation results from comparing the internal structure of one representation with the structure of similar representations with respect to a set of constraints. A sentence will be considered well-formed if it complies with these constraints in a better way than all its competitors.

So what does it mean for representations to be similar and to comply well with a given constraint set? To understand this, one needs to know four fundamental assumptions that underlie OT. The first one is that grammars consist of a set of universal constraints. If all languages have exactly the same constraints, one wonders how languages are ever allowed to differ. This is taken care of by assuming that constraints can be violated (assumption 2), and by allowing languages to prioritize different constraints (assumption 3). Prioritizing certain constraints over others is formally expressed by a constraint ranking. Those constraints that are ranked high in the grammar of a given language will be more important in determining well-formedness than those that are ranked lower. An intuitive way to think about constraints is that they are criteria for grammaticality. Languages do not differ in those criteria themselves but only in how they apply them. This brings us to the fourth assumption, that the process of determining the grammaticality of a given representation is one of optimization. A grammatical sentence is the optimal representation among a set of competing alternative representations with respect to a given constraint ranking.

The assessment of a representation as being optimal involves several steps, which the following diagram should help illustrate:

(27) *input* → GEN → *candidates* → EVAL → *output*

(adopted from McCarthy, 2002, p. 10)

The first step in this process is the input, which can be thought of as the bundle of information that a linguistic expression is to convey. Exactly what information is specified in the input has, for the domain of syntax, as yet not been clearly identified (Müller 2000, p. 13). GEN, the generator, produces a set of candidates, all of which express this information but do so in linguistically different ways. These candidates then compete against each other in the evaluation process (EVAL). Almost every linguistic expression (if not all) will violate some constraint. This fact in itself does not induce ungrammaticality, however. What is essential is which of the competing candidates minimally violates the highest ranked constraints (i.e., which representation best complies with the most important constraints). Despite violating some constraints, this candidate is optimal with respect to a given constraint ranking, and the optimal candidate is then considered to be the well-formed output.

Thus, whereas all languages share the same set of constraints, they differ in their constraint rankings. However, not all constraints can be freely re-ranked. There are certain constraint subhierarchies which are universally fixed in their ranking. These subhierarchies are not arbitrarily stipulated but are derived by harmonic alignment of prominence scales. This harmonic alignment will be the topic of the next subsection.

4.2. HARMONIC ALIGNMENT.

As was pointed out in the background section, the droppability of a constituent depends on its recoverability. In order not to induce a breakdown in communication, a necessary prerequisite for such recoverability seems to be that the dropped constituent be a continued topic. However, it appears that, for German, this criterion is not sufficient, as not all continued topics can be dropped. Subject topics as well as topical 3rd person objects are apparently more easily recoverable than 1st and 2nd person objects, and the question arises as to what makes these topics easier to recover. One possible answer to this question is that it is those topics that are in some sense more typical or natural, or, to use a different term, unmarked.

The identification of natural or unmarked grammatical phenomena has been an area of extensive investigation within the framework of functional-typological linguistics (see, e.g., Croft, 1990). Such markedness has often been expressed in prominence hierarchies, in which the most prominent (i.e., unmarked) member is usually more frequent, often morphologically less complex and also less restricted in its syntactic distribution than its less prominent counterpart(s) (Croft 1988, p. 160). Prominence hierarchies that are relevant for the purpose of the present paper are the grammatical-relations hierarchy and the person hierarchy:

(28) Relational hierarchy: (Keenan & Comrie 1977) — SU > DO > IO > OBL > OCOMP

(29) Person hierarchy: (Silverstein 1976, cited in Aissen 1999) — Local Person (1st & 2nd) > 3rd

These prominence hierarchies are claimed to be universal, and are, for the most part, uncontroversial, even across different frameworks (Aissen 1999, p. 679). Furthermore, it has been noted that such prominence hierarchies interact with each other. Cross-linguistic research has shown that associations between different scales are more or less natural. Thus, Croft (1988, p. 169), points out that the person scale interacts with the relational hierarchy in that a prototypical subject has been observed to be local whereas a prototypical object is 3rd person.

These cross-linguistically established degrees of naturalness or markedness of various associations of one prominence hierarchy with a second prominence hierarchy have been formally expressed by the notion of harmonic alignment within the framework of optimality theory (Aissen 1999, 2000). Harmonic alignment was first defined by Prince and Smolensky (1993, p. 149). This definition is given in (30) (where "x ➤ y" means "x is more harmonic than y" and "x >> y" means: "x is ranked higher than y"):

(30) Definition: Alignment

Suppose a given binary dimension D_1 with a scale X > Y on its elements {X, Y}, and another dimension D_2 with a scale a > b > … > z on its elements. The *harmonic alignment* of D_1 and D_2 is the pair of Harmony scales:

H_X:	X/a	➤	X/b	➤	…	➤	X/z
H_Y:	Y/z	➤	…	➤	Y/b	➤	Y/a

The *constraint alignment* is the pair of constraint hierarchies:

C_X:	*X/z	>>	…	>>	*X/b	>>	*X/a
C_Y:	*Y/a	>>	*Y/b	>>	…	>>	*Y/z

To derive degrees of harmonic alignment, a binary scale, which is usually structural in that it makes reference to a position (in the syllable, or in sentence structure) is combined with one other hierarchy in the following way. The member that is high on the binary scale is associated with each member of the second hierarchy starting with its most prominent member. This alignment is the most harmonic one. Every consecutive association is successively less harmonic. (31) illustrates this alignment using Aissen's proposal (1999, p. 681) of applying it to the relational scale (28) and the person scale (29). The relational scale was turned into a binary structural scale by only differentiating between subject (*Su*) and non-subject (*Oj*, i.e., object):

(31) Su > Oj

local person > 3rd person

Similarly, the member that is low on the binary scale is associated with each member of the second hierarchy forming the most harmonic alignment with its least prominent member and becoming successively less harmonically aligned with each consecutive member as one goes up the scale. This is shown in (32):

(32) Su > Oj

local person > 3rd person

Thus, harmonic alignment yields the following two subhierarchies (Aissen 1999, p. 681):

(33) a. Su/local ➤ Su/3
b. Oj/3 ➤ Oj/local

Such subhierarchies are then translated into constraint hierarchies in accordance with the above definition by Prince and Smolensky. Since the spirit of constraints is to avoid ungrammatical representations the ranking is inverted, thus penalizing the most disharmonic alignments most severely. In the above case, this would mean that both in the subject and the object case, there are two constraints that are ordered in the following way (Aissen 1999, p. 681):

(34) **a. Subjects:**
*Third person subjects (*Su/3).
>>
*Local subjects (*Su/local).

b. Objects:
*Local objects (*Oj/local).
>>
*Third person objects(*Oj/3).

Within the framework of optimality theory, all constraints are assumed to be universal and languages only differ with respect to the particular ranking of constraints. With regard to constraint hierarchies that are based on harmonic alignment, however, the ranking of the involved constraints to each other is universally fixed (Müller, 2000). This means that it is inherent in the grammar of any language that third person subjects are penalized more strongly than local subjects, to take one example. It is noteworthy, though, that this universal ranking only holds within the derived subhierarchy. No predictions are made with respect to the ranking of constraints that belong to separate subhierarchies, and the way in which different constraint subhierarchies are interpolated can vary between languages.

Since constraints are thought to be violable, the above 'avoid-constraints' do not mean that languages may not have local objects, for example. Instead, the constraint ranking reflects a 'preference' that may then be grammatically expressed in a particular language. Thus, the above alignment has been used to account for languages that disallow passives with local person agents (e.g., **The baby was looked after by us.*), a phenomenon that is cross-linguistically not uncommon (Lushootseed would be one such example, Aissen 1999, p. 690). Such passives would yield sentences in which the oblique object is a local person, which is a disharmonic alignment. Instead these languages require an active sentence under these circumstances, resulting in a sentence with a local person subject, which forms a harmonic alignment. These languages exhibit a subject-

object asymmetry quite similar to the one observed for German topic drop. Whereas the surface subject of a passive sentence can freely vary in these languages, (oblique) objects are limited to the third person.

As Lushootseed helps illustrate, some languages completely disallow disharmonic candidates, at least in certain environments (active/passive). Other languages, on the other hand, allow disharmonic alignments but mark those morphologically (Aissen 1999, p. 696). Such morphological marking has been captured formally by using two very general constraints: *∅, which expresses the idea that all linguistic information should be overtly expressed, and *STRUC, which serves exactly the opposite purpose of penalizing any linguistic structure (Aissen 1999, pp. 697/98) These two constraints capture the tension between ease (*STRUC) and expressiveness (*∅) that exists in languages. To account for the universal tendency among languages to morphologically mark disharmonic alignments, the constraint *∅ is locally conjoined with each of the two constraint subhierarchies under (34) in the following way:

(35) a. Subjects: *∅ & *Su/3 >> *∅ & *Su/local

b. Objects: *∅ & *Oj/local >> *∅ & *Oj/3

(adapted from Aissen 1999, p. 698)

This conjunction expresses "the idea that the presence of a marked [disharmonic] category is bad, but zero expression of a marked [disharmonic] category is worse" (Aissen 1999, p. 697). The result of conjoining *∅ with a whole constraint hierarchy is that the less harmonic (higher ranked) configurations will be more likely to be morphologically marked than the more harmonic (lower ranked) ones, exactly the typological insight at issue here. However, so far these conjunctions will lead to morphological marking in all cases. Therefore, *STRUC is needed to counter this tendency. Interpolating *STRUC within such a constraint hierarchy marks the point at which the grammar of a given language stops requiring overt marking (Aissen 1999, p. 700). Thus, all of the above constraints that are ranked higher than *STRUC will require overt morphological marking whereas those ranked lower will not.

These constraints have been used to explain the distribution of overt case marking (Aissen 1999). The most interesting case is one in which languages exhibit differential object marking, a phenomenon found in many split-ergative languages in Australia. In these languages it is quite common that objects are overtly case-marked if they are local person (e.g., *They met me-ACC.*) but bear no case marking if they are third person (e.g., *I met them-∅.*), and the reverse is true for subjects of transitive sentences (Silverstein 1976, cited in Aissen 1999). In such languages the *STRUC constraint is interpolated between the constraints dealing with third person subjects and local objects on the one hand and those dealing with local subjects and third person objects on the other (curly brackets indicate that these constraints are not ranked with respect to each other):

(36) {*∅ & *Su/3, *∅ & *Oj/local} >> *STRUC >> {*∅ & *Su/local, *∅ & *Oj/3}

Thus, morphological marking is obligatory on arguments that exhibit disharmonic alignment but not on those exhibiting harmonic alignment. Again, this resembles the facts for German topic drop in that local objects are penalized whereas third person objects are not.

What the OT approach provides us with, then, is a set of universal constraints, such as *STRUC, and a set of universal constraint hierarchies like the ones in (34) or (35). These constraints and constraint hierarchies form part of the grammar of every existing language. With respect to a constraint hierarchy, the ranking of the pertinent constraints to each other is also universally fixed, but languages vary in how they interpolate different constraint hierarchies into each other, and which constraints they prioritize by ranking them high. The question that remains to be addressed is how this information can be applied to German topic drop. This question will be dealt with in the next subsection.

4.3. GERMAN TOPIC DROP.

The basic insight in the case of German topic drop is that the more harmonically aligned arguments are, in a way, more natural and therefore easier to recover and may consequently be dropped, whereas the disharmonic ones cannot be so easily recovered and thus have to be overtly expressed. All of the constraints and constraint hierarchies needed to formalize this idea have already been motivated in the preceding subsection to account for quite different phenomena in languages typologically unrelated to German. But by virtue of their being universal constraints, they are postulated also to be part of the grammar of German.

To capture the differential naturalness of the various topic types, the constraint hierarchies in (34) are needed, which I rephrase here as (37) for convenience:

(37) a. Subjects: *Su/3 >> *Su/local b. Objects: *Oj/local >> *Oj/3

In addition to this harmonic alignment ranking, we need local conjunction with *∅ to ensure that disharmonically aligned topics are overtly expressed. This conjunction is parallel to what has been proposed for languages with differential object marking but differs slightly from the analysis advocated there in that disharmonic alignments are not marked via additional overt morphology; rather, it is the entire lexical item that has to be overtly expressed (but may be dropped for the more harmonic alignments). Local conjunction with the constraint hierarchies in (37) yields the following constraint hierarchies ([38] = [35]):

(38) a. Subjects: *∅ & *Su/3 >> *∅ & *Su/local b. Objects: *∅ & *Oj/local >> *∅ & *Oj/3

The subhierarchy in (a), as well as the one in (b), is universally fixed in its ranking, but how and if the constraint hierarchies are interpolated with each other is language-specific. For German, I propose the following ranking:

(39) *∅ & *Oj/local
>>
*∅ & *Su/3
>>
{*∅ & *Su/local, *∅ & *Oj/3}

This ranking is partly determined by the universally fixed ranking within the two subhierarchies, which requires *∅ & * Su/local to be ranked lower than *∅ & *Su/3, and *∅ & *Oj/3 to be ranked lower than *∅ & *Oj/local. It is language particular in that *∅ & *Oj/local needs to outrank all the other constraints in order to reflect the fact that local objects are most severely penalized for zero exponence, with all remaining topic types being penalized less. The precise ranking of the constraint *∅ & *Oj/3 (relative to *∅ & *Su/local and *∅ & *Su/3) is not clear from the facts about German topic drop, and one may need to look elsewhere in the grammar of German to determine where exactly it needs to be ranked.

Finally, we need to account for the fact that recoverable continued topics, being unnecessary additional information, do not need to be overtly expressed. The constraint that penalizes unnecessary overt form is *STRUC, which (in analogy with Aissen 1999, p. 698) will be subscripted with *CT* (=continued topic) here to make specific reference to the phenomenon under discussion:

(40) $*STRUC_{CT}$: penalizes the overt expression of continued topics.

*$STRUC_{CT}$ is interpolated into the constraint ranking in (39) in the following way:

(41) *Ø & *Oj/local
>>
*$STRUC_{CT}$
>>
*Ø & *Su/3
>>
{*Ø & * Su/local, *Ø & *Oj/3}

To see how this works we consider two evaluations. Since the topic is the only relevant information in determining the grammaticality of topic drop, I will only specify the input with respect to this information. Thus, the input contains two pieces of information: grammatical relation/person. It specifies if the given constituent is an object or a subject, whether it is local person or third person. Tableau 1 shows the evaluation of a sentence whose input contains a topical local person object.

TABLEAU 1: Sentences with local object topics

Input: Oj/local	*Ø&*Oj/ local	*$STRUC_{CT}$	*Ø&*Su/3	*Ø&*Su/ local	*Ø&*Oj/3
(a) dropped topic	*!				
☞ (b) overt topic		*			

There are two candidates: a sentence in which the topic is dropped (candidate (a)), and one in which it is overtly expressed (candidate (b)). Candidate (a) violates the highest ranking constraint (symbolized by an * in the relevant cell) because it does not overtly express a local object argument of the verb. This violation is fatal (indicated by the exclamation mark) since candidate (b) does not violate this highest ranked constraint (it does overtly express the local object). Candidate (b) only violates the lower ranked constraint *STRUC since it overtly expresses a continued topic, which is additional linguistic material. Candidate (b) is nevertheless the optimal candidate as it does not violate the highest ranked constraint.

Tableau 2 shows the evaluation of a sentence whose input specifies a local person subject as the sentence topic.

TABLEAU 2: Sentences with local subject topics

Input: Su/local	*Ø&*Oj/ local	*$STRUC_{CT}$	*Ø&*Su/3	*Ø& *Su/ local	*Ø&*Oj/3
☞ (a) dropped topic				*	
(b) overt topic		*!			

Again, a candidate with a dropped topic (candidate (a)) competes with one that overtly expresses the topic (candidate (b)). This time neither of the candidates violates the highest ranked constraint. Both of them might contain an object, but it will not be dropped. Thus this constraint is not decisive here. However, candidate (b) still violates *STRUC, the second highest ranking constraint, because it overtly expresses a continued topic, which is additional linguistic form. And this violation is fatal since candidate (a) does not violate this constraint. Candidate (a), which only violates the lower ranked constraint, *Ø & *Su/local, turns out to be the optimal candidate.

Thus, the OT framework provides us with a set of independently motivated constraints which, given the language-particular ranking, correctly rules out all ungrammatical cases of topic drop. All of the constraints used in the present analysis are typologically well grounded. The only aspect of the present proposal that would require additional evidence is the particular ranking of the constraints for German. The constraint ranking as

advocated here should have other reflexes in the grammar of German, either with respect to different syntactic phenomena involving subjects and objects, or the ranking could result in a frequency effect. Constraint rankings that do not produce categorical differences in grammaticality have been proposed to be mirrored in soft constraints surfacing as frequency effects (Bresnan, Dingare and Manning 2001). This would mean that topic drop should be more frequent if the constraint requiring the overt expression of the topic is ranked very low.

In addition to this, there are a number of other problems with the above proposed account that will not be solved here but should be noted. The first problem concerns the optionality of topic drop in German. The present proposal predicts a complementary distribution of dropped and overt topics which depends on the particular association of grammatical function with person. However, German never requires dropping; it is purely optional. This optionality might be accounted for by a weighted constraint ranking, which allows constraints to re-rank with each other with a certain probability, and which has been proposed to account for language-internal variation (McCarthy 2002, p. 228).[2]

A second problem is that, despite the fact that more than one topical element may occur in a German sentence and that topics are not necessarily placed in sentence-internal position, topic drop is restricted to only sentence-initial topics. The present proposal cannot account for this fact. Instead it predicts that it should be possible to drop topics from any position within the sentence. This problem might be solved by incorporating Grimshaw and Samek-Lodovici's (1998) constraint SUBJ, which penalizes sentences in which the specifier of the highest projection is not filled. Local conjunction with the constraint hierarchy as proposed here might yield the right results.

Thus, these problems do not seem unsolvable and present a challenge for future research rather than being a fatal flaw of the analysis.

5.0. DISCUSSION

The focus of the present paper was the subject-object asymmetry observed for German topic drop. Whereas subject topics of all kinds can be dropped, only third person objects can. Two accounts were offered for this asymmetry. On the one hand, a generative account proposed by Rizzi (1994), and on the other, an optimality theoretic one. How, then, can we evaluate the two alternatives against each other?

In contrast to Rizzi's account in which, though using a universally motivated operator, the asymmetry is nevertheless accounted for with particular reference to German, the OT account relates German topic drop to subject-object asymmetries exhibited by typologically unrelated languages for quite different syntactic phenomena, such as the restriction on local oblique objects in passive sentences in languages like Lushootseed. Along the same lines, German topic drop is related to languages that show differential object marking. In both cases the local object is penalized, though through different overt manifestations. The way in which these phenomena, which on the surface seem rather unrelated, are unified is the more general principle of harmonic alignment.

The universal hierarchies that were used to explain German topic drop in and of themselves have nothing to do with topicality or droppability and were motivated on independent grounds. Using these hierarchies, the restrictions on the droppability of objects could be derived without much further stipulation. This is clearly not true for Rizzi's account. Since object drop in languages like Chinese, in which first, second and third person objects can be dropped, has also been analyzed by applying the topic operator (Haegeman 1994, p. 472); nothing motivates the operator's restriction to third person for German other than that it is needed to account for the observed facts and is thus purely stipulated.

Finally, both accounts also differ on empirical grounds. Since nothing seems to motivate the restriction of an operator to third person, one would expect that operators could, in principle, also be specified for local persons. Thus, Rizzi's proposal would be able to account for languages that allow object drop only for local person but not for third person. The same holds true for (non-agreement identified) subject drop. Since operators are, in general, not limited to objects (Haegeman 1994, p. 466), it seems that it should, in principle, be possible to have an operator in [Spec CP] linking a null constant located in [Spec IP] to the discourse topic. This operator could then again be restricted to either local person or to third person, and one might expect languages

allowing only third person subjects to be dropped but not local subjects and vice versa. Languages could also entirely disallow subject drop, in which case the topic operator is completely unavailable, or allow all topical subjects to be dropped, as in the analysis of German.

The OT analysis, on the other hand, is much more restrictive in its typological predictions. Here, languages that allow third person subjects but not local person subjects to be dropped are predicted to be impossible, since they would necessarily require a re-ranking within the constraint subhierarchies (*∅ & *Su/local would have to outrank *∅ & *Su/3), violating the claim that these rankings are universally fixed. The same is true in the case of object drop, for which it predicts that no language should allow only local person objects to be dropped but not third person objects. However, the OT approach does account for languages like Chinese, which allow all topical subjects and all topical objects to be dropped. In these languages, the universally fixed constraint ranking within the hierarchies is observed, but the *STRUC_{CT} constraint outranks all of them and thus permits all topics to be dropped. Viewed in this way, the OT account makes a stronger claim and is in principle easier to falsify than Rizzi's generative account. It rules out certain language types and thus limits the amount of variation of topic drop one would expect to find among the world's languages.

6.0. CONCLUSION

In this paper I have shown that with respect to topic drop, German falls within the limited range of possible grammars provided for within the framework of optimality theory. The subject-object asymmetry observed in this area was derived from the notion of harmonic alignment, formally expressed within OT by constraint hierarchies. All of the constraints drawn on in the present OT analysis of German topic drop have already been claimed to be universal on the basis of analyses of languages typologically unrelated to German and for syntactic phenomena that are not obviously linked to either topicality or droppability. Their specification to particular constructions as well as the exact ranking of the constraints follows common practices of OT analyses.

The viability of OT as a universal syntactic framework as well as the particular OT analysis offered in this paper would be further strengthened if the few remaining problems were solved. The proposed OT analysis cannot as yet account for the optionality of dropping and its restriction to sentence-initial topics. In addition to this, further evidence for the proposed constraint ranking in other syntactic domains of German would be desirable. However, none of these appears to be an insurmountable obstacle.

NOTES

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1. I am slightly diverging from Rizzi here, who claims that even for subject-initial sentences the root is a CP, but that the [Spec CP] position for subject fronting is an A-position to which the null constant can move. For the treatment of German topic drop, this difference is not essential, however.
2. According to this idea, constraints are not ranked in a way in which one strictly dominates the other, instead they are ranked on a scale and can be more or less distant from each other. A normally distributed noise factor is added to the ranking value of each constraint, so that constraints that are very close to each other can occasionally reverse their ranking and thus produce variation.

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